```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5394803 seqs, 2962729879 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IDENTITY NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 March 1, 2005, 06:00:32; Search time 681 Seconds (without alignments) 8770.725 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-617-962-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Published_Applications_NA:*

1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*

1: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atggttatacaattaacacc.....ctcattataaaaatatatga 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Copyright
                                                                                                                                                                                                                                                                            cgn2
nn2_6/ptodata/1/pubpna/USO7_NEW_PUB.seq:*
nn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USO8_NEW_PUB.seq:*
nn2_6/ptodata/1/pubpna/USO8_NEW_PUB.seq:*
nn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USO9B_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USO9B_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USO9B_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USO9B_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USO9B_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USOB_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USOB_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USOB_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USOB_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USOB_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USOB_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USOB_PUBCOMB.seq:*
nn2_6/ptodata/1/pubpna/USOB_NEW_PUB.seq:*
nn2_6/ptodata/1/pubpna/USOB_NEW_PUB.seq:*
nn2_6/ptodata/1/pubpna/USOB_NEW_PUB.seq:*
nn2_6/ptodata/1/pubpna/USOB_NEW_PUB.seq:*
nn2_6/ptodata/1/pubpna/USOB_NEW_PUB.seq:*
nn2_6/ptodata/1/pubpna/USOB_NEW_PUB.seq:*
nn2_6/ptodata/1/pubpna/USOB_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

1 2 2 3 3 6 4 4 7 7 7 110 110 110 110 110 110 110 110 1	Result
1008 663.8 663.8 51 50.6 49.8 48.8 48.2 47.6 47.4	Score
100.0 65.9 65.9 5.1 5.0 4.8 4.8 4.7	% Query Match
1008 1107 1205 8056 188971 11394 1866 2767 16217 942	% Query Match Length DB
17 17 17 18 17 17 17 17	
7 US-10-617-962-2 7 US-10-617-962-1 7 US-10-617-962-1 7 US-10-617-962-3 8 US-10-473-126-386 9 US-10-235-192A-27 10 US-10-240-453-95 6 US-10-349-680-73 7 US-10-311-533-23 7 US-10-311-535-23 10 US-10-311-96A-531 10 US-10-329-624-531	SUMMARIES
Sequence 2, Appli Sequence 1, Appli Sequence 5, Appli Sequence 386, App Sequence 27, Appl Sequence 95, Appl Sequence 73, Appl Sequence 23, Appl Sequence 531, App Sequence 531, App	Description

			42	41	40	39	38	37	36	c 35	34	33	32	31	30	c 29	28	c 27		25	24	23		21				17	c 16	15	14 ·	c 13	12
43.6	43.8	43.8	43.8	44	44	44	44	44	44	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.8	44.8	44.8	45	45.2	45.2	45.2	45.2	45.4	45.6	46	46.2	46.4	46.4	47	47	47.4
4.3	4.3	<u>4</u> ن	4.3	4.4	4.4	4.4	4.4	4.4			4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5	5	5	5	5	4.5		4.6	4.6	4.6	4.6	4.7	4.7	4.7
6418	3673778	54775	54775	3673778	50000	18683	18683	831	609	3673778	13508	13508	1491	1491	1488	973	3399			6103	13377		4985							260	11052	549	158001
15	σ			σ		16 1				σ	17 1	8 U	17 1		9 U								16 1					18 1			17 1	10 1	17 1
US-10-311-455-296	US-10-312-841-1	US-10-741-600-17684	US-10-741-601-5659	US-10-312-841-2	US-10-706-635-24	US-10-240-452-33	US-10-311-455-285	US-10-706-635-69	US-10-424-599-102915	US-10-312-841-1	US-10-329-624-120	US-08-781-986A-120	US-10-282-122A-8174	US-09-815-242-8559	US-09-815-242-4589	US-10-424-599-58879	US-10-793-639-600	US-10-027-632-10421	US-10-027-632-10421	US-10-311-455-1664	US-10-221-714A-198	US-10-311-455-1436	US-10-056-405-10	JS-10-094-240-10	US-10-087-192-1990	US-10-221-613-326	US-10-706-635-27	US-10-322-281-700	US-10-473-126-240	US-10-424-599-100851	US-10-257-166-68	US-09-991-936-879	US-10-211-179-11
Sequence 296, App			Sequence 5659, Ap		Sequence 24, Appl	Sequence 33, Appl	285	Sequence 69, Appl	Sequence 102915,	Sequence 1, Appli	Sequence 120, App	Sequence 120, App	Sequence 8174, Ap	Sequence 8559, Ap	Sequence 4589, Ap	58879			Sequence 10421, A	1664			10,	10,	Sequence 1990, Ap	326				Sequence 100851,	Sequence 68, Appl	Sequence 879, App	GENERAL INFORMATI

ALIGNMENTS

US-10-617-962-2

```
; Sequence 2, Application US/10617962
publication No. US2004055036A1
GENERAL INFORMATION:
APPLICANT: Commonwealth Scientific and Industrial Research Organisation
TITLE OF INVESTION: luminescens
FILIR PREFERENCE: DS017=0076
CURRENT FILING DATE: 10017-014
PRIOR APPLICATION NUMBER: US/09/463,048A
PRIOR FILING DATE: 2002-12-13
PRIOR APPLICATION NUMBER: PCT/AU98/00562
PRIOR APPLICATION NUMBER: PO 8088
PRIOR FILING DATE: 1997-07-17
PRIOR APPLICATION NUMBER: PO 8088
PRIOR FILING DATE: 1997-07-17
PRIOR APPLICATION NUMBER: PO 8088
PRIOR FILING DATE: 1997-07-17
PRIOR APPLICATION NUMBER: PO 8088
PRIOR FILING DATE: 1997-07-17
PRIOR APPLICATION NUMBER: PO 8088
PRIOR FILING DATE: 1997-07-17
PRIOR APPLICATION NUMBER: PO 8088
PRIOR APPLICATION NUMBER: PO 9088
PRIOR APPLICAT
```

```
RESULT 2
US-10-617-962-1
; Sequence 1, Application US/10617962
; Publication No. US20040055036A1
; GENERAL INFORMATION:
; APPLICANT: Commonwealth Scientific and In
; APPLICANT: EAST, Peter David
; TITLE OF INVENTION: Toxin Genes from the
                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                         밁
                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                              841
                                                                                                                                                   961
                                                                                                                                                                             106
                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                          AATACAATGACGGTTCATAGTGTTGGAACTCATTATAAAATATATGA 1008
                                                                                                                                                                                                                                          ACAGCAGCGAAAAGTATTGGTACAGCCAGTGGCAGTAACCTGGAAAAAATTGCCGAATAAT
                                                                                                                                                                                                                                                                                                                         GTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTATATAGTGTGAGGCTAAGCCAAAAAGACAGGGTAACCTTTACTCAAAATGATACTGAC
                                                                                                                                                                                                                                                                            GCTGCAAAACAAAGTATAGTTCATTTATAAAAGAGGTACAAAAGGGTAACGCTCCACAG
                                                                                                                                                                                                                                                                                          GCTGCAAAACAAAAGTATAGTTCATTATAAAAGAGGTACAAAAGGGTAACGCTCCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                           CAACAATCAAATGCCGCAAGATTTTTTAAATTAATTGATTTCTTATCTTATCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACGATAAATTATTAGCACTATATTTTTTTCTCTGTACAGGAAATTCCCACTGGAGGAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATGGAATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATGGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGT
                                                                                                                                                                                                                             ACAGCAGCGAAAAGTATTGGTACAGCCAGTGGCAGTAACCTGGAAAAATTGCCGAATAAT
                                                                                                                                                                                                                                                                                                                                                                                             AGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAAATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACGATAAATTATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAGGAGATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCA
                                                                                                                                                                                                                                                                                                                                                                           AGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAAATGGAGA
                                                                                                                                                                            IGAGGCTAAGCCAAAAAGACAGGGTAACCTTTACTCAAAATGATACTGAC
     the
                            Industrial Research
   Bacteria
   Xenorhabdus
                           Organisation
  nematophilus
                                                                                                                                                                            960
                                                                                                                                                                                                   960
                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
   and
   Photox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: 050179-0076

CURRENT APPLICATION NUMBER: US/10/617,962

CURRENT FILING DATE: 2003-07-14

PRIOR APPLICATION NUMBER: US/09/463,048A

PRIOR FILING DATE: 2002-12-13

PRIOR FILING DATE: 2002-12-13

PRIOR FILING DATE: 1998-07-17

PRIOR FILING DATE: 1998-07-17

PRIOR FILING DATE: 1998-07-17

NUMBER: OF SEQ ID NOS: 20

SOFTWARE: Patentin version 3.1

SEQ ID NO 1

LENGTH: 1107

TYPE: DNA

ORGANISM: Xenorhabdus nematophilus
                                                                    Ś
                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                   S
                                                B
                                                                                                 음 성
                                                                                                                                              밁
                                                                                                                                                                       S
                                                                                                                                                                                                문
                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-617-962-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 65.9%;
Best Local Similarity 79.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION:
                                                                          672
                                                                                                   657
                                                                                                                        612
                                                                                                                                                   597
                                                                                                                                                                                                   537
   777
                         715
                                                  717
                                                                                                                                                                                                                          492
                                                                                                                                                                                                                                                   477
                                                                                                                                                                                                                                                                           432
                                                                                                                                                                                                                                                                                                  417
                                                                                                                                                                                                                                                                                                                           372
                                                                                                                                                                                                                                                                                                                                                   357
                                                                                                                                                                                                                                                                                                                                                                                                    297
                                                                                                                                                                                                                                                                                                                                                                                                                          252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    835;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATAT
                                                                                                 TTATATTGAGAGAAAAAAACTTTCTAAACCTTTCTTCGACCACCGCAGAGATTACCTGA
                                                                                                                                                                                                                                                                                                                  TTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATT
                                                                                                                                                                                                                                                                                                                                                                 TATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCTCAACTTCCAGAAGACTATTATAAAAATAAGGATAACACAGGTAGAATTTATCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATACGTGTACTAGAATTCAAGCAAACAAATGAAAGTCATACAGGATTGTATGGAATTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGA
  TGGCAGAACAGGCTACTTGGCCGGTCCAACAAAAGCGCCTAAATTGCCAACAACGTCTTC
                                                                    GGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAA
                                                                                                                                                                                                                  TGCCGCAAGATTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACT
                                                                                                                                                                                                                                                                 ATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAA
                                                                                                                                                                                                                                                                                                   CTGGGATATTCCTGATCTTGAGAATAAACTATTGGAAGATTATTCAGATGAAGATAAATT
                                                                                                                                                                                                                                                                                                                                                   TATGGCAAATGATTTTACCCCAGAACGAACTGGAGGTTTGGAGGTCAACGTCTTAAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                    ATACATGTCTAATCTTTATCTGCACTATTGGGTGAGAATGGTGATCAAATTTCTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                   ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCCTAAAGA
                                                                                                                                                   GGGAAAAAGGATT
                                                                                                                                                                                                                                                   ATTAGCACTATATTTCTTTGCTTCACAAGAACTTCCAATGGAGGCAAATCAACAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTAACGCCTGATGATAAAGGTGAATATCAACCCGTTGAAAAGCAAATAGCGGGAGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  luminescens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 663.8; DB 17;
Pred. No. 2.7e-127;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches 162;
                  -TGGAGAGTGAGTTTTAAAGAACTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Сарв
```

116

176 191

356

236 251 296 311

836

776

714

۲.,

4.

```
ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 3
US-10-617-962-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
á
                               밁
                                                             á
                                                                                              밁
                                                                                                                       ş
                                                                                                                                                            밁
                                                                                                                                                                                        Ś
                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PILE REFERENCE: 050179-0076
CURRENT APPLICATION NUMBER: US/10/617,962
CURRENT FILING DATE: 2003-07-14
PRIOR APPLICATION NUMBER: US/09/463,048A
PRIOR FILING DATE: 2002-12-13
PRIOR FILING DATE: 2002-12-13
PRIOR APPLICATION NUMBER: PCT/AU99/00562
PRIOR FILING DATE: 1998-07-17
PRIOR APPLICATION NUMBER: PO 8088
PRIOR FILING DATE: 1997-07-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-617-962-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 5, Application US/10617962
Publication No. US20040055036A1
GENERAL INFORMATION:
APPLICANT: Commonwealth Scientific and Industrial Research Organisation
APPLICANT: EAST, Peter David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 5
LENGTH: 1205
                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Toxin Genes from the Bacteria Xenorhabdus nematophilus and TITLE OF INVENTION: luminescens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 20
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Xenorhabdus nematophilus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 741
   312
                                 313
                                                                                              253
                                                                                                                                192
                                                                                                                                                             193
                                                                                                                                                                                           132
                                                                                                                                                                                                                           133
                                                               252
                                                                                                                                                                                                                                                                                                                                                      835;
                                                                                                                                                                                                                                                         72
                                                                                                                                                                                                                                                                                        73
                                                                                                                                                                                                                                                                                                         12 ATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATAT 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAGTGTTGGAACTCATTATAAAAATATATAGA 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TACAGCCAGTGGCAGTAACCTGGAAAAATTGCCGAATA---ATTTATATAGTGTGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAATAACAAATCTAGGAATGGATTTTCTAATATGGAAGGGGCTGCAAAACAAAAGTATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGATAACCCATCCAGAAATACATTTATGAAAATGGATGATGCTGCAAAACGAAAATATAG
                                                                                                                      ATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGA
                                                                                                                                                                                                                           AATACGTGTACTAGAATTCAAGCAAACAAATGAAAGTCATACAGGATTGTATGGAATTGC
                                                                                                                                                                                                                                             AGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGA 131
                                                                                                                                                                                                                                                                                        AGTAACGCCTGATGATAAAGGTGAATATCAACCCGTTGAAAAGCAAATAGCGGGAGATAT 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCCAAAAAGACAGGGTAACCTTTACTCAAAATGATACTGACAATACAATGACGGTTCA 977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCATTTATAAAAGAGGTACAAAAGGGTAATGATCCACGTGCAGCAGCAGCAAGTATTGG
 TATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACAT 371
                                  ATACATGTCTAATCTTTTATCTGCACTATTGGGTGAGAATGGTGATCAAATTTCTAAAGA
                                                   ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGA 311
                                                                                              CTCTCAACTTCCAGAAGACTATTATAAAAATAAGGATAACACAGGTAGAATTTATCAAGA
                                                                                                                                                                                           ATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCCAAGAACACAGGGTAACATTCTCCATAAATAATACTGACCAAATAATGGAGATCCA
                                                                                                                                                               <u>ATATCGAGCTAAGAAAGTAATAATAGCATATGCTTTAGCGGTAAGTGGTATTCATAATGT</u>
                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                     65.9%;
                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                     Score 663.8; DB 17; Pred. No. 2.8e-127;
                                                                                                                                                                                                                                                                                                                                                      Mismatches 162;
                                                                                                                                                                                                                                                                                                                                                      Indels 54; Gaps
                                                                                                                                                                                                                                                                                                                                                                                  Length 1205;
                                                                                                                                                                                                                           192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      917
                                  372
                                                                                              312
                                                                                                                                251
                                                                                                                                                                                           191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     896
                                                                                                                                                             252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Photo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                   S
                                  ; OTHER INFORMATION: US-10-473-126-386
                                                                                                                                                                                                                                                                                                       US-10-473-126-386/c
                                                                                                                                                                                        Sequence 386, Application US/10473126
Publication No. US20040234973A1
GENERAL INFORMATION:
APPLICANT: Epigenomics AG
TITLE OF INVENTION: Methods and nucleic acids for the analysis of
TITLE OF INVENTION: proliferative disorders
FILE REFERENCE:
                                                                              CURRENT APPLICATION NUMBER: US/10/473,126
CURRENT FILING DATE: 2003-09-26
NUMBER OF SEQ ID NOS: 1258
SEQ ID NO 386
LENGTH: 8056
TYPE: DNA
ORGANISM: Artificial Sequence
   Query Match
                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                      1033
                                                                                                                                                                                                                                                                                                                                                                        1093 AAGTGTTGGAACTCATTACCAAAATATATAA 1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    433 CTGGGATATTCCTGATCTTGAGAATAAACTATTGGAAGATTATTCAGATGAAGATAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         372 TTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            741 AAATAACAAATCTAGGAATGGATTTTCTAATATGGAAGGGGCTGCAAAACAAAAGTATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCAGCAAATTTTTTAAAGTAATTGATTTTTTACTTATCTTATCTGCTGTAACATCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCCGCAAGATTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGAAAAAGGATTTTTTCAAAAAATTTTTACAATGGTCTAGAAACTAAATCATTAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTAGCACTATATTTCTTTGCTTCACAAGAACTTCCAATGGAGGCAAATCAACAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                           TAGTGTTGGAACTCATTATAAAAATATATGA 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                      NAGCCAAGAACACAGGGTAACATTCTCCATAAATAATACTGACCAAATAATGGAGATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCCAAAAAGACAGGGTAACCTTTACTCAAAATGATACTGACAATACAATGACGGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCATTTATAAAAGAGGTACAAAAGGGTAATGATCCACGTGCAGCAGCAGCAAGTATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGATAACCCATCCAGAAATACATTTATGAAAATGGATGATGCTGCAAAACGAAAATATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ----TGGAGAGTGAGTTTTAAAGAACTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGCAGAACAGGCTACTTGGCCGGTCCAACAAAAGCGCCTAAATTGCCAACAACGTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAAGTTACCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAGATTACCTGA
                                                 chemically treated
   .18;
    Score
    51;
                                                 genomic
    멂
    18;
                                                   DNA
   Length 8056;
                                                   (Homo
                                                 sapiens)
                                                                                                                                                                                                                           hematopoietic cel
                                                                                                                                                                                                                                                                                                                                                                                                                                       1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             732
```

```
RESULT 5
US-10-235-192A-27
Sequence 27, Application US/10235192A
Publication No. US20040043389A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ठ
 S
                                     문
                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                           Query Match
Best Local S
Matches 263
                                                                                                                                                                                                                                                                                                                               SEQ ID NO 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 45.: Matches 226; Conservative
                                                                                                                                                                                   -10-235-192A-27
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: McCarthy, Jeanette
TITLE OF INVENTION: Methods and Compositions for Identifying
TITLE OF INVENTION: Risk Factors for Abnormal Lipid Levels and the Diseases
TITLE OF INVENTION: and Disorders Associated Therewith
FILE REFERENCE: MMI-011
                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/235,192A
CURRENT FILING DATE: 2002-09-04
NUMBER OF SEQ ID NOS: 49
NUMBER OF FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                FEATURE: misc feature
NAME/KEY: misc feature
LOCATION: 145329-145428, 187896-187995,
OTHER INFORMATION: N = any nucleotide
                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                              ENGTH:
                                                                                                                          Local Similarity
                                       103629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141 TAAGAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGTATCTAAACT
                                                                                                             263;
       72
                                                                         12
                                                                                                                                                                                                                                                                                                            188971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATTTTTTCAAAAAACTTTTTACAATGGATTAGAGGCTAAATCATTAGAGAAATTATATTGA 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGAATATATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGAAAAAACTTTCTAAA 639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACTGGGAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCTATATATGAATATATATGAATATCTATACATGAATATCTATATGAATATCTATAT 103688
                                                                       ATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTACAAAATTTTATACA 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATATTTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAATGCCGCAAG 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATTATTAGCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACATTTGGAATGT 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TARTCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTTCTAAAGATATGGCAAA 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGA 131
                                                                                                           5.0%;
ilarity 42.6%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        45.3%;
                                                                                                           <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. 2.6;
0; Mismatches 270;
                                                                                                         Score 50.6; DB 17;
Pred. No. 10;
0; Mismatches 354;
                                                                                                                                                                                                                     195894-195993
                                                                                                           Indels
                                                                                                                                           Length 188971;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ψ
                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           260
                                                                       71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-240-453-95
; Sequence 95, Application US/10240453
; Publication No. US20030148326A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
 US-10-240-453-95
                                                                                                                                        FILE REFERENCE: 5013.1009

CURRENT APPLICATION NUMBER: US/10/240,453

CURRENT FILING DATE: 2002-10-02

PRIOR APPLICATION NUMBER: PCT/EP01/03973

PRIOR FILING DATE: 2001-04-06

PRIOR FILING DATE: 2000-04-06

PRIOR FILING DATE: 2000-04-07

PRIOR APPLICATION NUMBER: DE 10019173.8

PRIOR FILING DATE: 2000-04-07

PRIOR APPLICATION NUMBER: DE 10032529.7

PRIOR APPLICATION NUMBER: DE 10032529.7
                                                                                   NUMBER OF SEQ ID NOS: 350
SEQ ID NO 95
LENGTH: 11394
                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: D
TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: OLEK, Alexander APPLICANT: PIEPENBROCK, CI
                 FEATURE:
OTHER INFORMATION:
                                                                       TYPE: DNA
                                                    ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  104169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              104049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      103989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            103929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  103869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         103809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               103749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       103689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            104229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ÄTÄTGAÄTATÄCATGÄÄTÄTATGAÄTATATATGAÄTATATGAÄTATCTATATGAATÄTÄT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGAATATCTATATGAATATCTATATATGAATATCTATGAATATCTATATATGAATATCT 103748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTATATTGAGAGAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGA 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATATGAATATATA 104245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGAAGGAGGATTTTTTCAAAAAACTTTTTACAATGGATTAGAGGCTAAATCATTAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGAATTATATATGAATATATATGAATATATATATATGAATATATGAATATATATATATGA 104168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATATATATGAATATATATATGAATATATATGAATATATATATATATATATATATATATATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACAT 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATTATATATGAATTTATATATGAATATATATGAATATATATATATATATATATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          BERLIN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PIEPENBROCK, Christian
                                                                                                                                                                                                                                                                                                                                                                                                                    Diagnosis of Diseases Associated with DNA Transcription
                  chemically treated
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kurt
                                                                                                                                                                                                                                                                                                                                                                                by Means of Assessing the Methylation Status With DNA TRanscription
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              628
                 genomic
                  DNA
                  (Homo
                 sapiens)
                                                                                                                                                                                                                                                                                                                                                                                                   of Genes Associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              104108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  103928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        103868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               103808
```

```
PRIOR APPLICATION NUMBER: PCT/US99/01972
PRIOR FILING DATE: 1999-01-29
PRIOR APPLICATION NUMBER: US 60/073,189
PRIOR FILING DATE: 1998-01-30
NUMBER OF SEQ ID NOS: 181
SOFTWARE: Patentin version 3.2
SEQ ID NO 73
LENGTH: 1866
                                                                                                                                                                                            밁
                                                                                                                                                 Ś
                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                           8
                                    밁
                                                                         Ś
                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA ; ORGANISM: Ureaplasma urealyticum US-10-349-680-73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-349-680-73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 73, Applicate Publication No. US200 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                    Query Match 4.8%;
Best Local Similarity 47.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                      Matches 249;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Cadsell, Gail
APPLICANT: Chen, Ellson
APPLICANT: Glass, Jennifer
APPLICANT: Glass, Jennifer
APPLICANT: Hainer, Cheryl
APPLICANT: Hainer, Cheryl
APPLICANT: Lifthownitz, Elliot
TITLE OF INVENTION: MUCLEIC ACID PROBES AND METHOD FOR DETECTING UREAPLASMA
TITLE OF INVENTION: UREALYTICUM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/349,680
CURRENT FILING DATE: 2003-01-23
PRIOR APPLICATION NUMBER: US 09/601,198
PRIOR FILING DATE: 2000-12-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: UAB-13403/22
                                      1217
                                                                                                                                                                                              1097
                                                                                                                1157 ATATTACACAAAAATAATTAAAAATCTTTTATTAGATGCTTTCAATAATAATGATGTTC
                                                                                                                                                                                                                                                                        1037 ATGAAAAAAACAACAAATAAGAATTATTTTAGATCTTTTGATAAAGAATTGAATTATT 1096
                                                                                                                                                     241 -- ATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATC
                                                                                                                                                                                                                                 182 ТТСАТААТСТАААСТТССТБАТБАСТАТТАТААБААТААДАБАСТБСТБАБАБА-
                                                                                                                                                                                                                                                                                                             122 ATGGAATTGAATATCGAGCTAAGAAAATAATTAGCTTACGCTTTGGCTGTAAGTGGTA 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   124 GGAATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATT 183
  359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    438 AAGGGTTAGTATTTATATATTTÄTTTĞTTTGTTTAGTTĞAGAĞAGĞTTTAGAAATAA 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       244 TATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATT 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       184 CATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                318 GGAATGGATTAGAGTGGTAAGATATTAGAATTTATGTTTAGTTTATAGATATATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATAT 360
ATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGATATTTÄTTAGTÄÄTGÄTTGTATTTÄGTGTTTÄGAGTTTTTTGGTTTTTÄÄTÄT 554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATATATATATAATATAAATGTGTATATATGTATAAATATTTATAAATATGTGTATATT
                                      TTCAAAAATATATTGATCATAATTTAGATATTAATAATAAAAAATTTCAAAGGAAGCAT 1156
                                                                         AMATTTCTAMAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAAT 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/10349680
                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US20030176654A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.9%;
                                                                                                                                                                                                                                                                                                                                                  Score 48.8; DB 16; Length Pred. No. 4.4; O; Mismatches 267; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 49.8; DB 15;
Pred. No. 5.3;
0; Mismatches 117;
                                                                                                                                                                                                                                                                                                                                                                                           Length 1866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 11394;
                                                                                                                                                                                                                                                                                                                                                    10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       243
                                                                                                                                                       298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                437
                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
```

```
RESULT 9
US-10-311-455-597
IUS-10-311-455-597
Sequence 597, Application US/10311455
Publication No. US20030143606A1
GENERAL INFORMATION:
APPLICANT: DIEFENBROCK, Christian
APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases As:
TITLE OF INVENTION: Cytosine methylation
FILE REFERENCE: 5013.1014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; NAME/KEY: CDS
; LOCATION: (2)...(1507)
US-10-301-533-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 8
US-10-301-533-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Godzik, Adam
APPLICANT: Reed, John C.
TITLE OF INVENTION: Microbial Sumo Protease Ho
FILE REFERENCE: P-LJ 5488
CURRENT APPLICATION NUMBER: US/10/301,533
CURRENT FILING DATE: 2002-11-20
PRIOR APPLICATION NUMBER: US 60/331,895
PRIOR FILING DATE: 2001-11-20
NUMBER OF SEQ ID NOS: 51
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 23, Application US/10301533 Publication No. US20030203473A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 23
LENGTH: 2767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Plasmodium
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1455 AAATCCTATTACTAAAGAGATGTTAGGACCAAGTGAAAAATATTTAAAAAAGGTTAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1337 ATAAGCAAAAATTAAATGATTATGAAAAAATATTTTCACAAAATTGGTATTTTATTTTAA 1396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1277 AATTAATAGAATTTAGTAATTATTTTAAAAACCAAAAAACACCAAGAGATTCTAATGAAT 1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1515 ACTTAAACCATATGAGGATTATTATTTCATTAATAATTATTTAGAA 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   303 TTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      534 ATCTGCTGTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       419 ATGACGATAAATT-----ATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGA 473
                                                                                                                                                                                                                                                                                                                 682 TGATGAAGTATACAATAATATAGATGATGACTATAAA 718
                                                                                                                                                                                                                                                                                                                                                            363 ГСААЛАСАТТІССАЛІТІССТСАССТІСЛАЛАЛІЛАЛ 399
                                                                                                                                                                                                                                                                                                                                                                                                         243 TTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          594 GGCTAAATCATTAGAGAATTATTATTGAGAGAAAAAAACTTTCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             89;
APPLICATION NUMBER: US/10/311,455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               falciparium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 48.2; Di
Pred. No. 6.7;
0; Mismatches
                                                               Associated with the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             68; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                  System
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                533
                                                                                                                                                                                                                                                                                                                                                                                                           68
                                                                                                                                                                                                                                                                                                                                                                                                                                                      362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1514
                                                                  γ
                                                                  Deter
```

```
RESULT 10
US-08-781-986A-531
; Sequence 531, Application US/08781986A
; Publication No. US20030054436A1
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-311-455-597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 597
LENGTH: 16217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 221;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE: 2002-12-16
PRIOR APPLICATION NUMBER: PCT/BP01/07537
PRIOR FILING DATE: 2001-07-02
PRIOR APPLICATION NUMBER: DE 10032529.7
PRIOR APPLICATION SUMBER: DE 10043826.1
PRIOR PILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: DE 10043826.1
PRIOR PILING DATE: 2000-09-01
                                                                                        GENERAL INFORMATION:
APPLICANT: Charles Kunsch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 2424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCATION: 12269
OTHER INFORMATION: n is a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: unsure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                     TITLE OF INVENTION: Staphylococcus
NUMBER OF SEQUENCES: 5255
                                             CORRESPONDENCE ADDRESS:
STREET:
CITY: I
            ADDRESSEE: Human
STREET: 9410 Key
                                                                                                                                                                                                                                                                                  2915
                                                                                                                                                                                                                                                                                                                                            2855
                                                                                                                                                                                                                                                                                                                                                                                                          2795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2495
                                                                                                                                                                                                                                                   604
                                                                                                                                                                                                                                                                                                                                                                             484
                                                                                                                                                                                                                                                                                                                                                                                                                                        424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     124 GGAATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATT 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATT 243
 Rockville
                                                                                                                                                                                                                                                TTAGAGAATTATATTGAGAGAAAAAAACTT
                                                                                                                                                                                                                                                                               AGTAGTAGTTTTTTTTGATTTTAGTTAAAAAGTGTATAAAATATGATATAGGAATTT 2974
                                                                                                                                                                                                                                                                                                                                            CAATCAAATGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTA 543
                                                                                                                                                                                                                                                                                                                                                                                                        AGTATTTAGTTTAGATTTTATTATTTTTTTTTAATTTAGTTTAGTTATAGAGAAATTA 2854
                                                                                                                                                                                                                                                                                                                                                                                                                                       GATAAATTATTAGCACTATATTTTTTCTCTGTACAGGAAATTTCCACTGGAGGAAAATCAA 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGAC 423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATT 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAAATAATGTATTTTATTAAAAAATTAAAATTAGAAAATGTAATATAAAGATGTAATG 2554
                                                                                                                                                                                                                                                                                                          ACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCA 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCT 363
                                                                                                                                                                                                                     AGTGGGAATTTTATAGAGAATATTAAATTT 3004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATATTTATATGAATTTAAATTTTTATTATTGTTAAATAAATTTAAATATTTAAATTTAGA 2734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chemically treated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.7%;
              Genome Sciences,
West Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 47.6; DB 15;
Pred. No. 17;
0; Mismatches 289;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
                                                                           aureus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          genomic
                                                                                                                                                                                                                                                633
                                                                           Polynucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens)
                                                                        and Sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-08-781-986A-531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 20850
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEPHONE: (301)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STATE: N
COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                           493
                                                                                                                                                                                                                                                                                                                                                                                                                                       433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Maryland
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
            Rockville
```

```
RESULT 11
US-10-329-624-531
US-10-329-624-531
; Sequence 531, Application US/10329624
; Publication No. US20040043037A1
; Publication INFORMATION:
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        I INFORMATION FOR SEQ ID NO: 53

| INFORMATION FOR SEQ ID NO: 53
| SEQUENCE CHARACTERISTICS:
| LENGTH: 942 base pairs
| TYPE: nucleic acid
| STRANDEDNESS: double
| TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2
SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: (301) 309-8504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION
Gil H. Choi

Patrick S. Dillon

Craig A. Rosen

Steven C. Barash

Michael R. Fannon

TITLE OF INVENTION: Staphylococcus aureu

NUMBER OF SEQUENCES: 5256

CORRESPONDENCE ADDRESS:

ADDRESSE: Human Genome Sciences, I.

STREET: 9410 Key West Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Benson, Bob
REGISTRATION NUMBER: 30,
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      306 TAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGT 354
                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAACAAGGAACATACGCTTTTATTAAGAAAGAAGATTCTATTAAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACGCCATCAAATGCTGATTTTTGTATTTTAGTTAATGGTGATTCAATGGAACCTATGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAAGAATATATGTCTAATCTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTC 305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATAGGAGAAGAATTATATGATGACATATTGCATGAAGAAGTATTTTTTAAAGAAGACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGATGAATATAAAGAGTCTAAACTAGTATCGTATATTGCATGTGGTGCAACTGGTGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAAAACGTACTTAACTACGCAAATGAGCAATTAGATGAACAGAATAAAGTCACTTCTAT 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Diskette, 3.50 inch, 1.4Mb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/781,986A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30,446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PB248PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 47.4; D
Pred. No. 6.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                       aureus Polynucleotides and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 942;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                     Sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       492
```

The second secon

```
RESULT 12
US-10-211-179-11
; GENERAL INFORMATION:
; APPLICANT: Nicholas M. Dean
; APPLICANT: Nicholas M. Dobie
; TITLE OF INFORMATION: ANTISENSE MODULATION OF PHOSPHOTYROSYL PHOSPHATASE ACTIVATOR EXPR
; FILE REFERENCE: PTS-0011
; CURRENT APPLICATION NUMBER: US/10/211,179
; CURRENT FILING DATE: 2002-08-01
; NUMBER OF SEQ ID NOS: 119
; OTHER INFORMATION: n = a, t, c, or 9
US-10-211-179-11
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-329-624-531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 4.7%;
Best Local Similarity 47.8%;
Matches 138; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO: 531:
SEQUENCE CHARACTERISTICS:
LENGTH: 942 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 27-Dec-2002

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/956,171

FILING DATE: October 20, 1997

APPLICATION NUMBER: 60/009,861

FILING DATE: January 5, 1996

APPLICATION NUMBER: 08/781,986

FILING DATE: January 3, 1997

ATTORNEY/AGENT INFORMATION:

NAME: Mark J. Hyman

REGISTRATION NUMBER: 46,789

REFERENCE/DOCKET NUMBER: PB248P1D1

TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA: US/10/329,624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                       553
                                                                                                                                                                                                                                                                                                                                                                                         306 TAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGT 354
                                                                                                                                                                                                                                                                                                                                                                                                                                      493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            186 TAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66 AGATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGGTCATACAGCATCATATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTTGGCTGTAAGTGGTATTCA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                    AACGCCATCAAATGCTGATTTTTGTATTTTAGTTAATGGTGATTCAATGGAACCTATGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATAGGAGAAGAATTATATGATGACATATTGCATGAAGAAGTATTTTTTAAAGAAGACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGATGAATATAAAGAGTCTAAACTAGTATCGTATATTGCATGTGGTGCAACTGGTGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGAAAACGTACTTAACTACGCAAATGAGCAATTAGATGAACAGAATAAAGTCACTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb
COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2
SOFTWARE: ASCII Text
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: (240) 314-1224
TELEFAX: (301) 309-8439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DESCRIPTION: SEQ ID
4.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 47.4; DB 17;
Pred. No. 6.6;
0; Mismatches 151;
                                                                                                                                                                                                                                                                                                                                                   TTTATTAAGAAAGAAGATTCTATTAAAGAT 601
  Score 47.4;
Pred. No. 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             531:
                     DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          storage
                   Length 158001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               942;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

```
Ś
                                            밁
                                                                Ś
                                                                                        밁
                                                                                                              Ś
                                                                                                                                                            Ş
                                                                                                                                                                                      밁
                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                             路
                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
밁
                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
127849
                                                                                                                                                                                                                                                                                                                                 127430
                                                                                                                                                                                                                                                                                                                                                                                127370
                                                                                                                                                                                                                                                                                                                                                                                                                             127250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          127190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      127010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 410;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          57 AATAGCAGGAGATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGC 116
                                                                                                                                                                                                                                                                                                         CTGAGAGAATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATG
AAAATGATACTGACAATACAATGACGGTTCATAGTGTTGGAACTCATTATAAAAATA 1003
                                            AATTGCCGAATAATTTATATAGTGTGAGGCTAAGCCAAAAAGACAGGGTAACCTTTACTC
                                                                                         GTAACGCTCCACAGACAGCAGCGAAAAGTATTGGTACAGCCAGTGGCAGTAACCTGGAAA
                                                                                                                                       CTAATATGGAAGGGGCTGCAAAACAAAAGTATAGTTCATTTATAAAAGAGGTACAAAAGG
                                                                                                                                                                                      ATPATATATAATATAAAAAAATATACAATATAATATATAAATATATATATATATATATA
                                                                                                                                                                                                             CGCCTAAATGGAGAGTGAGTTTTAAAGAACTTAAAAAATAACAAATCTAGGAATGGATTTT
                                                                                                                                                                                                                                   TTCGACCACCGCAGAGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAG
                                                                                                                                                                                                                                                                                                                                 TTACCTTATCTGCTGTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATG
                                                                                                                                                                                                                                                                                                                                                                                ATTCAGATGACGATAAATTATTAGCACTATATTTTTTCTCTG-----TACAGGAAATTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTCAATATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGATCAAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAAGTGGTATTCATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCATATGGAATTGAATAT----CGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 536;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
127905
                                                                   946
                                                                                                                                                              826
                                                                                                                                                                                                                                                                                                                                                        586
                                                                                                                                                                                                                                                                                                                                                                                                       526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             172
                                                                                                                                       127728
                                                                                                                                                                                                             766
                                                                                                                                                                                                                                                            706
                                                                                                                                                                                                                                                                                                            646
                                                                                                                                                                                                                                                                                                                                                                                127429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     127069
                                                                                                                                                                                      127668
                                                                                                                                                                                                                                     127608
                                                                                                                                                                                                                                                                                   127548
                                                                                                                                                                                                                                                                                                                                 127489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    127009
```

RESULT 13
US-09-991-936-879/c
1.Sequence 879, Application US/09991936
1.Sequence 870, Application US/09991936

APPLICANT: Brandt, Kevin S.

```
RESULT 14
US-10-257-166-68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: DNA
; ORGANISM: Ctenocephalides felis
US-09-991-936-879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 68, Application US/10257166 Publication No. US20040023230A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 879
                                                                                                          SEQ ID NO 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Gaines, Patrick J.
APPLICANT: Stinchcomb, Dan T.
APPLICANT: Wisnewski, Nancy
TITLE OF INVENTION: FLEA HEAD, NERVE CORD, HINDGUT AND MALPIGHIAN TUBULE
TITLE OF INVENTION: NUCLEIC ACID MOLECULES, PROTEINS AND USES THEREOF
FILE REFERENCE: FC-6-C1
                                                                                                                                                                                                                                                                          APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Method and Nucleic Acids for Analysing the Methylation
TITLE OF INVENTION: Genes Implicated in Pharmacogenomics
FILE REFERENCE: 5013.1011
CURRENT APPLICATION NUMBER: US/10/257,166
CURRENT FILING DATE: 2002-10-07
                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: OLEK, Alexander APPLICANT: PIEPENBROCK, CLAPPLICANT: BERLIN, Kurt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/128,704
PRIOR FILING DATE: 1999-04-09
NUMBER OF SEQ ID NOS: 1959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/991,936
CURRENT FILING DATE: 2001-11-21
PRIOR APPLICATION NUMBER: US/09/543,668
PRIOR FILING DATE: 2000-04-07
                                                                                                                           2000-09-01
NUMBER OF SEQ ID
                                                                                                                                                                                            PRIOR FILING DATE:
                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: PCT/EP01/07470
OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
                                           TYPE: DNA
ORGANISM: Artificial Sequence
                            FEATURE:
                                                                                    ENGTH: 11052
                                                                                                                                                                                                                  DE 10032529.7
DE 10043826.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENGTH: 549
                                                                                                                                                                       2000-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGAAGGAGGATTTTTTCAAAAAACTTTTTACAATGGATTAGAGGCTAAATCATTAGAGAA 611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTTACCTTATCTGCTGTAACTTCACT 551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTAAGACGACATTTCTTTTTACAATGCAAATTTGACTCAATCATTTTAAAGCTTCATT 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTAGCACTATATTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAA 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTTTATAAGCTTAAAGTTTACTTTAAAAAATATCGTTTTGTCAAATATGAAGATÄTGGA 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCAGTTGTAATGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTATATTGAGAGAAA 626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCCATACCATTTATAGAATTGATGCAGATAATGGGAACCCTATACTTTTTCATGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                        PIEPENBROCK, Christian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                            2001-06-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.7%; Score 47;
49.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches 130;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96
```

```
밁
                                                                                                Ś
                                                                                                                                  뫄
                                                                                                                                                                Ś
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                      ; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_62081C.1
US-10-424-599-100851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-424-599-100851
                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Chou Yihua
APPLICANT: Chou Yihua
APPLICANT: Cover you well in the content of invention: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21 (53223) B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 100851
LENGTH: 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 100851, Application US/10424599 Publication No. US20040031072A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM: Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   345
                                                                                                 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       128;
181
                               429
                                                                  121
                                                                                                                                                                    309
                                                                                                                                                                                                                                   249 AGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAA 308
                                                                                                                                                                                                                                                                       101;
                                                                                                                                  61
                                                                                                                                                              AGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAA 368
                                                                                                 CATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAA 428
                                                                                                                                  AAAAAGAGAAAATAGGTTTCACAAGTTCCTTCTACCCTGAAAATTTTTTTAAACTCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGAAAATGGTGATCAAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGAGACTGCTGAGAGAATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGG
 AAACTTACTACT
                               ATTATTAGCACT 440
                                                                  CGTTTGGATTTTTTAAAAAAATGAGCATAAAACAAAAGTTTGGTCATCTTAAGGGGGGAAA
                                                                                                                                                                                                     ÄTÄÄACTGTTAATÄCTTTTTAAAAACATTTTTTÄGTGCAAAAAGGACTTGAAGTTTCGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTGAGGTTTTGAAAATTTATAGT 1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGTGCTTATTCAGATGACGATAAATTATTAGCACTATATTTTTTCTCTGTACAGGAAAT 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTATAGTATTTTATTAAAAAAGGGGGTTTGGGTGAAGGTAGGTATTAAAAATAAAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCACTGGAGGAAAATCAACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   тттпаласстслататсстслаласатттссватсттсствассттвалалаталассатт
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.7%;
                                                                                                                                                                                                                                                                                   4.6%;
 192
                                                                                                                                                                                                                                                                    Score 46.4; DE Pred. No. 6.6; 0; Mismatches
                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 47; DB:
Pred. No. 20;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  487
                                                                                                                                                                                                                                                                                                       DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         135;
                                                                                                                                                                                                                                                                       91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 11052;
                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                       Length 260;
                                                                                                                                                                                                                                                                     <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         344
                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1255
                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          284
```

Search completed: March Job time : 696 secs

,,

2005,

08:28:53

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Perfect score:
                                                                                                                                                                                 0 0 0 0
                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                    იი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                  ဂ ဂ
       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                1008
663.8
663.8
628.2
521.4
521.4
521.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score
                                                                                                                                                                                                      50.6
48.8
47.8
47.4
47.4
47.4
47.4
                            44.6
44.6
44.6
44.6
44.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                             51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          March 1, 2005, 02:15:26 ; Search time 211 Seconds (without alignments) 7816.905 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Issued_Patents_NA:*

1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*

2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*

3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IDENTITY_NUC Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1202784 seqs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            65.9
62.3
51.7
51.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-617-962-2
                         65.9 1107
62.3 1272
51.7 834
51.7 834
61.7 1131
61.7 1141
5.9 7218
5.1 1055
5.1 1055
5.1 1055
5.1 1055
6.2 1141
4.8 1186
6.7 729
4.7 1055
4.7 1055
4.7 1075
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
4.7 41708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          atggttatacaattaacacc.....ctcattataaaaatatatga 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapext 1.0
                     US-09-463-048A-2
US-09-463-048A-1
US-09-463-048A-5
US-09-463-048A-5
US-08-569-168-3
US-08-569-168-3
US-08-569-168-2
US-09-806-708B-22
US-09-806-708B-23
US-09-806-708B-23
US-09-806-708B-23
US-09-806-708B-23
US-09-806-708B-23
US-09-806-708B-23
US-09-806-708B-23
US-09-806-708B-23
US-09-806-708B-23
US-09-806-71128-531
US-08-956-11712-51
US-09-676-512-3
US-09-676-512-3
US-09-676-512-13
US-09-676-122-21
US-09-676-123-3
US-09-979-016-123-3
US-09-979-016-123-3
US-09-979-016-123-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ij
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2405568
                                                                                                                                                                                                                                                                                                                                     Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
  Sequence
Sequence
                                                                 Sequence
Sequence
                                                                                                           Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
e 2, Appli
e 6, Appli
e 23, Appl
e 31, Appl

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-463-048A-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
```

					Ω			ი	ი					ი			O
45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
41.2	41.4	41.4	41.4	41.4	41.8	41.8	41.8	42.2	42.2	42.4	42.4	42.6	42.6	42.8	43.2	43.2	43.8
4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.2	4.2		4.2		4.2	4.2	4.3	4.	4.3
2142	2424	2424	1318	978.	3646	3146	2557	5136	5136	228896	627	640681	5340	7425	1470	1470	665
4.	4	4	4.	4.	4	4	4	4.	4	4	4	4.	4.	ω	4	4.	N
US-09-107-532A-905	US-08-781-986A-392	US-08-956-171E-392	US-09-925-637-1	US-09-248-796A-5337	US-09-710-279-4070	US-09-710-279-4281	US-09-710-279-3829	US-08-781-986A-332	US-08-956-171E-332	US-09-949-016-17127	US-09-248-796A-14060	US-09-790-988-1	US-09-627-122-21	US-09-453-702B-212	US-10-278-946-1	US-09-830-217-1	US-08-883-795A-36
Sequence 905, App	Sequence 392, App	Sequence 392, App	Sequence 1, Appli	Sequence 5337, Ap	Sequence 4070, Ap	Sequence 4281, Ap	Sequence 3829, Ap	Sequence 332, App	Sequence 332, App	Sequence 17127, A	Sequence 14060, A	Sequence 1, Appli	Sequence 21, Appl	Sequence 212, App	Sequence 1, Appli	. Sequence 1, Appli	Sequence 36, Appl

Sequence 2, Application US/09463048A Patent No. 6630619 GENERAL INFORMATION: APPLICANT: Commonwealth Scientific and Industrial Research Organisation APPLICANT: EAST, Peter David TITLE OF INVENTION: Toxin Genes from the Bacteria Xenorhabdus nematophilus and PhotoTITLE OF INVENTION: luminescens TITLE OF INVENTION: 1uminescens FILE REFERENCE: 050179-0076 CURRENT APPLICATION NUMBER: US/09/463,048A CURRENT FILING DATE: 2002-12-13 PRIOR APPLICATION NUMBER: PCT/AU98/00562

ALIGNMENTS

CURRENT APPLICATION NUMBER: US/09/463,048A
CURRENT FILING DATE: 2002-12-13
PRIOR APPLICATION NUMBER: PCT/AU98/00562
PRIOR FILING DATE: 1998-07-17
PRIOR APPLICATION NUMBER: PO 8088
PRIOR FILING DATE: 1997-07-17
NUMBER OF SEQ ID NOS: 20
SOFTMARE: Patentin version 3.1
SEQ ID NO 2
LENGTH: 1008
TYPE: DNA
ORGANISM: Photorhabdus luminescens
US-09-463-048A-2

	Query Match Best Local Similarity 100 Matches 1008; Conservative	ilarity Conservati	00.0%; 1 00.0%; 1	100.0%; Score 1008; DB 4; Length 1008; 100.0%; Pred. No. 6.7e-244; ive 0; Mismatches 0; Indels 0;	DB 4; 5.7e-244; 8 0;	Length 100	8; 0; Gaps	0,
Ş	щ	ATGGTTATACAATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATA	TAACACCT	GATGATAGAA	TGGATATCC	ACCCGTTGAA	AAGCAAATA	60
Вр	ч	ATGGTTATACAATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATA	TAACACCT	SATGATAGAA	STEGATATCC	ACCCGTTGAA	AAGCAAATA	60
Ş	61	GCAGGAGATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCA	TACGTATA	CTAAACTTTA	AGCAAACAGA	TGAGGGTCAT	ACAGCATCA	120
뮍	61	GCAGGAGATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCA 120	TACGTATA	CTAAACTTTA	AGCAAACAGA	TGAGGGTCAT	ACAGCATCA	120
Ş	121	TATGGAATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTTGGCTGTAAGTGGT	ATCGAGCT	AAGAAAATAAT	CATTAGCTTA	CGCTTTGGCT	GTAAGTGGT	180
멍	121	TATGGAATTGAATATCGAGCTAAGAAAATAATTAGCTTACGCTTTGGCTGTAAGTGGT	ATCGAGCT	AAGAAAATAAT	CATTAGCTTA	CGCTTTGGCT	GTAAGTGGT	180
Ş	181	ATTCATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGA	CTAAACTT	CCTGATGACTA	TTATAAGAA	TAAAGAGACT	GCTGAGAGA	240
ДЪ	181	ATTCATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGA	CTAAACTT	CTGATGACTA	ATTATAAGAA	TAAAGAGACT	GCTGAGAGA	240
Ş	241	ATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAA 300	ATATGTCT	ATCTTTCATO	TGCACTATT	AGGTGAAAAT	GGTGATCAA	300
멍	241	TTATCAAGAA	ATATGTCT	AATCTTTCATC	TGCACTATT	AGGTGAAAAT	GGTGATCAA	300
S	301	ATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATAT	ATGGCAAATO	GTTTTTATA	AGAATGAACT	GATTTTGAA	GGTCAATAT	360

Query Match 65.9%; Score 663. Best Local Similarity 79.4%; Pred. No.	; LENGTH: 1107 ; TYPE: DNA ; ORGANISM: Xenorhabdus nematophilus US-09-463-048A-1	PRIOR FILING DATE: 1997-07-17 NUMBER OF SEQ ID NOS: 20 SOFTMARE: Patentin version 3.1 SEQ ID NO 1	; CURRENT FILING DATE: 2002-12-13 ; PRIOR APPLICATION NUMBER: PCT/AU98/00562 ; PRIOR FILING DATE: 1998-07-17 ; PRIOR APPLICATION NUMBER: DO 8089	; TITLE OF INVENTION: Toxin Genes from the Bact; TITLE OF INVENTION: luminescens; FILE REFERENCE: 050179-0076; CURRENT APPLICATION NUMBER: US/09/463,048A	; Patent No. 6630619 ; GENERAL INFORMATION: ; APPLICANT: Commonwealth Scientific and I ; APPLICANT: EAST, Peter David	RESULT 2 US-09-463-048A-1 ; Sequence 1, Application US/09463048A	Qy 961 AATACAATGACGGTTCATAGTGTTGGAACTCATTATAAAATATATGA 1008	Qy 901 TTATATAGTGTGAGGCTAAGCCAAAAAGA	Qy 841 ACAGCAGCGAAAAGTATTGGTACAGCCAG	Qy 781 GCTGCAAAACAAAAGTATAGTTCATTTAT	Qy 721 GTGAGTTTTAAAGAACTTAAAAATAACAA	Qy 661 AGATTACCTGATGGCAGAATAGGTTATTT	Qy 601 TCATTAGAGAATTATATTGAGAGAAAAAA	Qy 541 GTAACTTCACTGGGAAGGAGGATTTTTTC	Qy 481 CAACAATCAAATGCCGCAAGATTTTTAA 	Qy 421 GACGATAAATTATTAGCACTATATTTTTT	Qy 361 CCTCAAAACATTTGGAATGTTCCTGAGCT	Db 301 ATTTCTAAAGATATGGCAAATGGTTTTTA
8; DB 4; Length 1107; 2.6e-157;				eria Xenorhabdus nematophilus and Photor	rial Research Organisation		1008	TTATATAGTGTGAGGCTAAGCCAAAAAGACAGGGTAACCTTTACTCAAAATGATACTGAC 960 Q;	900	GCTGCAAAACAAAAGTATAGTTCATTTATAAAAGAGGTACAAAAGGGTAACGCTCCACAG 840 O;	GTGAGTTTTAAAGAACTTAAAAATAACAAATCTAGGAATGGATTTTCTAATATGGAAGG 780	AGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAAATGGAGA 720	TCATTAGAGAATTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTT	GTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAA 600 Q;	CAACAATCAAATGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCT 540	GACGATAAATTATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAAT 480 OJ	CCTCAAAACATTIGGAAIGTICCIGAGCTIGAAAATAAACCATIGAGTGCTTAITCAGAT 420 O;	ATTICTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATAT 360
QY 978 TAGIGITGGAACTCATTATAAAATATATAA 1008	9) 10)	Qy 861 TACAGCCAGTGGCAGTAACCTGGAAAAATTGCCGAATAATTTATATAGTGTGAGGCT	Oy 801 TTCATTTATAAAGAGGTACAAAAGGGTAACGCTCCACAGACAG	Qy 741 AAATAACAAATCTAGGAATGGATTTTCTAATATGGAAGGGGCTGCAAAACAAAAGTATAG .	Qy 715	Qy 672 TGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAAA	Qy 612 TTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAGATTACCTGA	Qy 552 GGGAAGGAGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAA	OY 492 TGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACCTTCACT	Oy 432 ATTAGCACTATATTTTTTCTCTGTACAGGAAATTCACTGGAGGAAAATCAACAATCAAA	Qy 372 TIGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATT	OY 312 TATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACAT	Qy 252 ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGA	Qy 192 ATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGA	QY 132 ATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGT	OY 72 AGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGGATCATATGGAATTGA	QY 12 ATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATAT	Matches 835; Conservative 0; Mismatches 162; Indels 54; Gaps

心をなるなるがら

```
S
                                                              밁
                                                                                          Ś
                                                                                                                           밁
                                                                                                                                                   ð
                                                                                                                                                                                         밁
                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA
; ORGANISM: Xenorhabdus nematophilus
US-09-463-048A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
US-09-463-048A-5
   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 5, Application US/09463048A
Patent No. 6630619
GENERAL INFORMATION:
APPLICANT: Commonwealth Scientific and Industrial Research Organisation
APPLICANT: EAST, Peter David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn version 3.1
SEQ ID NO 5
LENGTH: 1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 835;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Toxin Genes from the Bacteria Xenorhabdus nematophilus and TITLE OF INVENTION: luminescens FILE OF INVENTION: luminescens FILE REFERENCE: 050179-0076
CURRENT APPLICATION NUMBER: US/09/463,048A
CURRENT FILING DATE: 2002-12-13
PRIOR APPLICATION NUMBER: PCT/AU98/00562
PRIOR FILING DATE: 1998-07-17
PRIOR APPLICATION NUMBER: PO 8088
PRIOR APPLICATION NUMBER: PO 8088
PRIOR FILING DATE: 1997-07-17
NUMBER: OF SEQ ID NOS: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                     372
                                                                                                                                                                                                                                                                                                                     373
                                                                                                                                                                                                                                                                                                                                                                                  313
   673
                               612
                                                              613
                                                                                            552
                                                                                                                           553
                                                                                                                                                         492
                                                                                                                                                                                         493
                                                                                                                                                                                                                        432
                                                                                                                                                                                                                                                       433
                                                                                                                                                                                                                                                                                                                                                  312
                                                                                                                                                                                                                                                                                                                                                                                                                 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12 ATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           73
                                                                                                                                              TGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACT
                                                                                                                                                                                                         ATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAA
                                                                                                                                                                                                                                                    CTGGGATATTCCTGATCTTGAGAATAAACTATTGGAAGATTATTCAGATGAAGATAAATT
                                                                                                                                                                                                                                                                          TTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATT
                                                                                                                                                                                                                                                                                                                   TATEGCAAATGATTTTACCCAGAACGAACTGGAGTTTGGAGGTCAACGTCTTAAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                ATACATGTCTAATCTTTATCTGCACTATTGGGTGAGAATGGTGATCAAATTTCTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                       ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                CTCTCAACTTCCAGAAGACTATTATAAAAATAAGGATAACACAGGTAGAATTTATCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATACGTGTACTAGAATTCAAGCAAACAAATGAAAGTCATACAGGATTGTATGGAATTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGA 131
                   TTATATTGAGAGAAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAGATTACCTGA
                                                                                          GGGAAGGAGTTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAA
                                                                                                                                                                                         ATTAGCACTATATTTCTTTGCTTCACAAGAACTTCCAATGGAGGCAAATCAACAATCAAA
                                                                                                                                                                                                                                                                                                                                               TATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATATCGAGCTAAGAAAGTAATAATAGCATATGCTTTAGCGGTAAGTGGTATTCATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGT
                                                              GGGAAAAAGGATTTTTTCAAAAATTTTTTACAATGGTCTAGAAACTAAATCATTAGAGAA
                                                                                                                           TGCAGCAAATTTTTTTAAAGTAATTGATTTTTTACTTATCTTATCTGCTGTAACATCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       65.9%;
79.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches 162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 663.8; DB 4;
Pred. No. 2.7e-157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels 54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1205;
                                                                                                                                                                                                                                                                                                                                                  371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               191
                             671
                                                              672
                                                                                          611
                                                                                                                          612
                                                                                                                                                         551
                                                                                                                                                                                       552
                                                                                                                                                                                                                      491
                                                                                                                                                                                                                                                      492
                                                                                                                                                                                                                                                                                     431
                                                                                                                                                                                                                                                                                                                   432
                                                                                                                                                                                                                                                                                                                                                                                  372
                                                                                                                                                                                                                                                                                                                                                                                                                 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Photo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 4
US-08-569-168-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
Query Match 62.:
Best Local Similarity 79.:
Matches 833; Conservative
                                                                       LENGTH: 1272 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic
                                                                                                                                                    TELEPHONE: 703-684-1111
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                     CLASSIFICATION: 424
ATTORNY/AGENT INFORMATION:
NAME: Price, Robert L.
REGISTRATION NUMBER: 22,685
REFERENCE/DOCKET NUMBER: 1451
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-684-1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 99 Canal CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: U
ZIP: 22314
                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٧A
                                                                                                                                                                                                                                                                                                                                                                                                                                                USA
                                                                            (genomic)
              62.3%;
```

```
Sequence 6, Application US/08569168;
Patent No. 5972687;
GENERAL INFORMATION:
APPLICANT: Smigielski, Adam J.
APPLICANT: Akhurst, Raymond J.
TITLE OF INVENTION: TOXIN GENE FR.
NUMBER OF SEQUENCES: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PATENTIN Release #1.0, Ve

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/569,168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1093 AAGTGTTGGAACTCATTACCAAAATATATAA 1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             978 TAGTGTTGGAACTCATTATAAAAATATATGA 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  672 TGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCCTAAA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    741 AAATAACAAATCTAGGAATGGATTTTCTAATATGGAAGGGGCTGCAAAACAAAAGTATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               733 TGGCAGAACAGGCTACTTGGCCGGTCCAACAAAAGCGCCTAAATTGCCAACAACGTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TACAAAAAGCGGCAGTAACTTCGAAAAACTGCAAGGTAGAGATTTATATAGATATAAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCCAAGAACACAGGGTAACATTCTCCATAAATAATACTGACCAAATAATGGAGATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCCAAAAAGACAGGGTAACCTTTACTCAAAATGATACTGACAATACAATGACGGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACAGCCAGTGGCAGTAACCTGGAAAAATTGCCGAATA---ATTTATATAGTGTGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCATTTATAAAAGAGGTACAAAAAGGGTAATGATCCACGTGCAGCAGCAGCAAGTATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGATAACCCATCCAGAAATACATTTATGAAAATGGATGATGCTGCAAAAACGAAAATATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B: Lowe, Price, Leblanc & Becker
99 Canal Center Plaza, Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/569,168
Score 628.2; DB 2;
Pred. No. 2.5e-148;
0; Mismatches 163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FROM XENORHABDUS NEMATOPHILUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -- TGGAGAGTGAGTTTTAAAGAACTTAA
    Indels
                                             Length 1272;
    57;
  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    852
    5
```

```
1098
                                                                                                           1038
                                                                                 916
                                                                                                                                       859
                                                                                                                                                                    978
                                                                                                                                                                                                                         918
                                                                                                                                                                                                                                                                                828
                                                                                                                                                                                                                                                                                                                                                                  671
                                                                                                                                                                                                                                                                                                                                                                                              738
                                                                                                                                                                                                                                                                                                                                                                                                                        611
                                                                                                                                                                                                                                                                                                                                                                                                                                                     678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        199
                                                                                                                                                                                             799
                                                                                                                                                                                                                                                     739
                                                                                                                                                                                                                                                                                                                                      798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12
                                                                                                                                                                                                                                                                                                                                                        ATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAAA------,----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGGAAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGGAATGTTCCTGAGCTTGAAAATAAACCATT-GAGTGCTTATTCAGATGACGATAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATAGTGTTGGAACTCATTATAAAAATATATGA 1008
                                                                      CTAAGCCAAAAAGACAGGGTAACCTTTACTCAAAATGATACTGACAATACAATGACGGTT
                                                                                                                              GGTACAGCCAGTGGCAGTAACCTGGAAAAATTGCCGAATA---ATTTATATAGTGTGAGG
                                                                                                                                                                                                                                       AAAAATAACAAATCTAGGAATGGATTTTCTAATATGGAAGGGGCTGCAAAACAAAAGTAT
                                                                                                                                                                                                                                                                                               -----TGGAGAGTGAGTTT-TAAAGAACTT
                                                                                                                                                                                                                                                                                                                                                                                                            ATTATATTGAGAGAAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAGATTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGGAAAAAGGATTTTTTCAAAAATTTTTTACAATGGTCTAGAAACTAAATCATTAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGCAGCAAATTTTTTTAAAGTAATTGATTTTTTTACTTATCTGCTGTAACATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTTACCTTATCTGCTGTAACTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGGGATATTCCTGATCTTGAGATAAACTATTGGAAGATTTATTCAGATGAAGATAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATTGGTGATCAAATTTTCTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCTCAACTTCCAGAAGACTATTATAAAAATAAGGATAACACAGGTAGAATTTATCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATACGTGTACTAGAATTCAAGCAAACAAATGAAAGTCATACAGGATTGTATGGAATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGA
CAAAGTGTTGGAACTCATTACCAAAATATATAA
                                                     CTAAGCCAAGAACACAGGGTAACATTCTCCATAAATAATACTGACCAAATAATGGAGATC
                                                                                                           AGTTCATTTATAAAAGAGGTACAAAAGGGTAATGATCCACGTGCAGCAGCAGCAGCAAGTATT
                                                                                                                                                                                             AGAGATAACCCATCCAGAAATACATTTATGAAAATGGATGATGCTGCAAAACGAAAATAT
                                                                                                                                                                                                                                                                                ATGGCAGAACAGGCTACTTGGCCGGTCCAACAAAAGCGCCTAAATTGCCAACAACGTCTT
                                                                                                                                                                                                                                                                                                                                                                                              ATTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAAGTTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATGGCAAATGATTTTACCCAGAACGAACTGGAGTTTG-AGGTCAACGTCTTAAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATACATGTCTAATCTTTTATCTGCACTATTGGGTGAGAATGGTGATCAAATTTCTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATATCGAGCTAAGAAAGTAATAATAGCATATGCTTTAGCGGTAAGTGGTATTCATAATGT
                                                                                                                                                                   1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            191
                                                                                975
                                                                                                                                      915
                                                                                                                                                                                                                                                     798
                                                                                                                                                                                                                                                                                                                                      857
                                                                                                                                                                                                                                                                                                                                                                                                                                                    737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                318
                                                                                                                                                                                                                                                                                917
                                                                                                                                                                                                                                                                                                                                                                714
                                                                                                                                                                                                                                                                                                                                                                                              797
                                                                                                                                                                                                                                                                                                                                                                                                                        670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71
                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                               밁
                                                    밁
                                                                           S
                                                                                                           밁
                                                                                                                              S
                                                                                                                                                                 밁
                                                                                                                                                                                          á
                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                           S
```

S

밁 S 뫄 Ş 밁 Ş 맑 S 밁

밁

밁

Ş 밁 S

S

밁

밁 Ş В Ś 밁 Ś

맑 Ś 밁 Ś 밁 Ş 밁 Ş 밁 ঠ 밁 Ş

```
RESULT 5
US-08-569-168-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-569-168-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION NUMBER: US/08/569, FILING DATE:
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Price, Robert L.
REGISTRATION NUMBER: 125,685
REFERENCE/DOCKET NUMBER: 1451
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-684-1111
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 834 base pairs
TYPE: nucleic acid
companymenames. single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3, Application US/08569168 Patent No. 5972687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 85.4
Matches 604; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ZIP: 22314

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IEM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Smigjelski, Adam J.
APPLICANT: Akhurst, Raymond J.
APPLICANT: Akhurst, Raymond J.
TITLE OF INVENTION: TOXIN GENE FROM XENORHABDUS NEMATOPHILUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: 11: MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lowe, Price, Leblanc & Becker STREET: 99 Canal Center Plaza, Suite 300
CITY: Alexandria
STATE: VA
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS: single TOPOLOGY: linear
 416
                                                                      357
                                                                                                                                              297
                                                                                                                                                                                 252
                                                                                                                                                                                                                                                                                             177
                                                                                                                                                                                                                                                                                                                                  132
                                                                                                                                                                                                                                                                                                                                                                      117
                                                                                                                                                                                                                                                                                                                                                                                                                                            57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12
                                                                                                                                                                                                                                                                                                                                                                  ATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATAT
                                                                                                                                                                                                                                                     ATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGA
                                                                                                                                                                                                                                                                                                                  ATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTAACGCCTGATGATAAAGGTGAATATCAACCCGTTGAAAAAGCAAATAGCGGGAGATAT
                              TTGGAATGTTCCTGAGCTTGAAAATAAACCATT-GAGTGCTTATTCAGATGACGATAAAT
                                                                      ATATCGAGCTAAGAAGTAATAATAGCATATGCTTTAGCGGTAAGTGGTATTCATAATGT
CTGGGATATTCCTGATCTTGAGAATAAACTATTGGAAGATTATTCAGATGAAGATAAAT
                                                                                                                                             ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGA
                                                                                                                                                                                                                         CTCTCAACTTCCAGAAGACTATTATAAAAATAAGGATAACACAGGTAGAATTTATCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA (genomic)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51.7%; Score 521.4; DB 2;
85.4%; Pred. No. 1.5e-121;
vative 0; Mismatches 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/08/569,168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1451-015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                          131
                                      430
                                                                                                                                                                                                                                                                                                                                  191
                                                                                                                                                                                                                                                                                                                                                                                                                                              116
   475
                                                                        415
                                                                                                          371
                                                                                                                                                356
                                                                                                                                                                                   311
                                                                                                                                                                                                                         296
                                                                                                                                                                                                                                                           251
```

The state of the s

191

236

296 251

```
문
                                   S
                                                                          밁
                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-569-168-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                               US-08-569-168-1
                                                                                                                                                   Query Match
Best Local Similarity
Matches 604; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application Patent No. 5972687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Smigielski, Adam J.
APPLICANT: Akhurst, Raymond J.
TITLE OF INVENTION: TOXIN GENE FROM XENORHABDUS NEMATOPHILUS
NUMBER OF SEQUENCES: 7
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-684-1111
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 837 base pairs
TYPE: NECLE CASE
                                                                                                                                                                                                                                                                                                                                                                                                                                ATTORNEY/AGENT INFORMATION:
NAME: Price, Robert L.
REGISTRATION NUMBER: 22,685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                               TOPOLOGY: 1i
                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 99 Canal
CITY: Alexandria
                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COUNTRY: U. ZIP: 22314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           431
   117
                                                                          57
                                                                                                               12
                                     72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGA
                         AGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGA 131
                                                                                              ATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGCCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAGATTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCAC 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATTAGCACTATATTTCTTTGCTTCACAAGAACTTCCAATGGAGGCAAATCAACAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATTAGCACTATATTTTTTCTCTGTACAGGAAAATTCCACTGGAGGAAAATCAACAATCAA
AATACGTGTACTAGAATTCAAGCAAACAAATGAAAAGTCATACAGGATTGTATGGAATTCC 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGCAGCAAATTTTTTTAAAGTAATTGATTTTTTACTTATCTTATCTGCTGTAACATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCAGAACAGGCTACTTGGCCGGTCCAACAAAAGCGCCTAAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAAGTTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGGAAAAAGGATTTTTTCAAAAAATTTTTACAATGGTCTAGAAACTAAATCATTAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B: Lowe, Price, Leblanc & Becker
99 Canal Center Plaza, Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                     Conservative
                                                                                                                                                                                                                                           DNA (genomic)
                                                                                                                                                                  51.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/08569168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/08/569,168
                                                                                                                                                                                                                                                                                                                                                                                                                    1451-015
                                                                                                                                                 Score 521.4; DB 2;
Pred. No. 1.6e-121;
0; Mismatches 101;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     #1.30
                                                                                                                                                   Indels
                                                                                                                                                                                    Length 837;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 717
                                                                                                                                                 2;
                                                                          116
                                                                                                            71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      610
밁
                                 8
                                                                                                                                                 ; NAME/KEY: promoter
; LOCATION: (1)..(1141)
; OTHER INFORMATION: consensus sequence
US-09-806-708B-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-806-708B-22/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 22, Application US/09806708B Patent No. 6784342 GENERAL INFORMATION:
                                                                                                                                                                                                                                                             SOFTWARE: PatentIn version 3.0
SEQ ID NO 22
LENCTH: 1141
TYPE: DNA
                                                                                        Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: The University of British Columbia TITLE OF INVENTION: Regulation of Embryonic TrILE REFERENCE: 4810-58741
CURRENT APPLICATION NUMBER: US/09/806,708B
CURRENT FILING DATE: 2001-04-03
                                                                                                                                                                                                                                                                                                                                                       CURRENT FILING DATE: 2001-04-03
PRIOR APPLICATION NUMBER: US 60/147,133
PRIOR FILING DATE: 1999-08-04
                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                           ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 372 TTGGAATGTTCCTGAGCTTGAAAATAAACCATT-GAGTGCTTATTCAGATGACGATAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 185 ATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTT 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              671 ATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAAATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          431 TATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        312 TATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        237 CTCTCAACTTCCAGAAGACTATTATAAAAATAAGGATAACACAGGTAGAATTTATCAAGT
                                                                          81;
                                                                                          Similarity
ACRNTRTWWABWKHSWCNNNNNNNNNNNNNNTWCHYTTANABBCYRANNNNAAARMARTC 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGCCAGAACAGCCTACTTGGCCGGTCCAACAAAAGCGCCTAAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAGATTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGGAAAAAGGATTTTTTCAAAAAATTTTTTACAATGGTCTAGAAACTAAATCATTAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGCAGCAAATTTTTTTAAAGTAATTGATTTTTTACTTATCTTATCTGCTGTAACATCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATTAGCACTATATTTCTTTGCTTCACAAGAACTTCCAATGGAGGCAAATCAACAATCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGGATATTCCTGATCTTGAGAATAAACTATTGGAAGATTTATTCAGATGAAGATAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATGGCAAATGATTTTACCCAGAACGAACTGGAGTTTG-AGGTCAACGTCTTAAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATACATGTCTAATCTTTATCTGCACTATTGGGTGAGAATGGTGATCAAATTTCTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAAATGGTGATCAAATTTCCTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATCGAGCTAAGAAAGTAATAATAGCATATGCTTTAGCGGTAAGTGGTATTCATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGT
                                                                                          6.2%;
                                                                      280;
                                                                      Score 62.6; DB 4;
Pred. No. 4.4e-06;
30; Mismatches 360;
                                                                                                                                                                 of A.t.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transcription
                                                                                                                                                               L.a., and B.n.
```

in Plants

6

Gaps

promoters

762 717

670

715

610

595 550 535

655

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
US-08-232-463-14/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                             Sequence 14, Application US/08232463 Patent No. 5670367
                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: DORNER,
           COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                 APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
NUMBER OF SEQUENCES: 52
                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                            CITY: Alexandria
                                                                                                                                                                                                STREET:
 APPLICATION NUMBER:
                                                                                                                         COUNTRY: USA
ZIP: 22313-0299
                                                                                                                                                             STATE:
                                                                                                                                                                                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          899 ATTTATA 905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KAKVRTA 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GKHHWBWWRRABHRSWNMWWVKCRNKYMVSWHYHAMRYBKWABAVGCNNNWKDRMAHHHW 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGTGAGTTTTAAAGAACTTAAAAATAACAAATCTAGGAATGGATTTTCTAATATGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RWTWKYMWKAACNNNNBKAMYMRVAWMMYSRDTTNTDWMMWTSDWBWHWYTVDYTMMRAW 355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MWWAANNDAGAMDHWTYWMGNNTMWMRRAWKMMNMAWCRRAYCCNNNNNRACVWHKHKMW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SGBVRMRWAGTMWWRHWNNNNTDTRYYWWWKRWARBTTTVYDSMCNAKSMWRGNNWRAMK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAACAATCAAATGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WYANWMRCRDVTYTRNNTYCKSYAHSYWYWSNNAMWYRRYSARNWSSMARWTTRNNWWM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATT-----CAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NNNMWKAYYAHATNNWGCWWNNTDARRTNNTTVMRRRWMTNTKTRWYSTTRRHHYTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NNYMHAAVTTTHTDWCYKTWMNTWYWDMMTTMBTTTTRNMTTSTNMTNNNNNNWACTNN 715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCAAGAATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTT 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGCTGCAAAACAAAAGTATAGTTCATTTATAAAAGAGGTACAAAAGGGTAACGCTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NNNNNNNNNNNNNNNSCCTCTRM/TWRWTMKGDGMTVRKKVKWRDTTCTYVDVWADSWV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATNINIMMWWWYAYMHIMHKKGKAAWTIIIKTABRDDHBAHVKTYWYWRYDYWCAMCWMIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGACAGCAGCGAAAAGTATTGGTACAGCCAGTGGCAGTAACCTGGAAAAATTGCCGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RMTYMGKTMTNNNNNNKAWYYRTKTVAWCNNRYYYDTAVWTBKRNYKYCYAYBWYYBMYM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NNNNNNWRBCKTTSWMWWMDHMNTHCTYGNNTWGSAYBMAAMSMWAAGASNBVTYNWCW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCCTAAATGGA 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGACGATAAATTATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAA 478
                                                                                                                                                             ٧A
                                                                                                                                                                                             1800 Diagonal Road,
                                                                                                                                                                                                                 Foley & Lardner
                                                                                                                                                                                                                                                                                                                            <u>"</u>
US/08/232,463
                                                                                                                                                                                              Suite 500
                               Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             295
```

```
밁
                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-08-232-463-14
                                                                                  á
                                                                                                               밁
                                                                                                                                          S
                                                                                                                                                                         밁
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 304:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703)836-9300
TELEFAX: (703)683-4109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY: line IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 6.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEX:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
1124
                                                                                                                1244
                                                                                                                                                                          1304
                                                                                                                                                                                                                                  1364
                                                                                                                                                                                                                                                                                            1424
                                                                                                                                                                                                                                                                                                                   581 ACAATGGATTAGAGGCTAAATCATTAGAGAATTATATTGAGAGAAAAAAACTTTCTAAAC
                                                                                                                                                                                                                                                                                                                                                                                                            25;
                                                                                                                                                                                                                                                                                           TCTTATTTACCTTATCTGCTGTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTT
TGGAAAAATTGCCGAATAATTTATATAGTGTGAGGCTAAGCCAAAAAAGACAGGGTAA 937
                                                                                                                  CAGAAGCGCCTAAATGGAGAGTGAGTTTTAAAGAACTTAAAAATAACAAATCTAGGAATG
                                                                                                                                                                                                                                 ANAAGGGTAACGCTCCACAGACAGCAGCGAAAAGTATTGGTACAGCCAGTGGCAGTAACC
                                                                                                                                            GATTTTCTAATATGGAAGGGGCTGCAAAACAAAAGTATAGTTCATTTATAAAAGAGGTAC
                                                                                                                                                                                                                                                               CTTTCTTTCGACCACCGCAGAGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       899149
                                                                                                                                                                                                                                                                                                                                                                                                             Conservative 225; Mismatches 167;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-AUG-199:
                                                                                                                                                                                                                                                                                                                                                                                                                           5.9%; Score 59.8; DB 1; 5.0%; Pred. No. 4.3e-05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EP 91 114 300.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/07/935,313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30472/114 IMMU
                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 7218;
                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                             <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
```

```
US-09-806-708B-23
                                                                                                                                                                                                              Sequence 23, Application US/09806708B
Patent No. 6784342
GENERAL INFORMATION:
APPLICANT: The University of British Columbia
TITLE OF INVENTION: Regulation of Embryonic Transcription
FILE REFERENCE: 4810-58741
CURRENT APPLICATION NUMBER: US/09/806,708B
CURRENT FILING DATE: 2001-04-03
PRIOR APPLICATION NUMBER: US 60/147,133
PRIOR FILING DATE: 1999-08-04
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PatentIn version 3.0
SEQ ID NO 23
```

ij

Plants

820

1305 700

760

640

A Section of the Section

寺大村 はい

, ,

```
RESULT 10
US-09-806-708B-22
; Sequence 22, App
                                                                                                        S
                                                                                                                                              밁
                                                                                                                                                                       S
                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ន
                                                                                   뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -09-806-708B-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: promoter LOCATION: (1)..(1055)
OTHER INFORMATION: consensus sequence of A.t. and L.a. FAB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Artificial FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 1055
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                               802
                                                                                                                                                                              742
                                                                                                                                                                                                             704
                                                                                                                                                                                                                                           682
                                                                                                                                                                                                                                                                           644
                                                                                                                                                                                                                                                                                                                                        584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            104
                                                                                                                                              764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           165;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24 TGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATATAGTACGTATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NNNNNAKAACKRATTWGWRAKSNCTCTTAGGTTTKRATCCWAYTCGAGWATKKWKTWKTS
                                                                                                                                                                                                        YTTRTANNGACTTTTTNNTTGGMRINTAAARGWANNNNNNNNNNNNNNNGACWAWRTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                    GYKWNTAWAYWCWTWYYYRAGAAWTAWYMTSATCYCATAATTAGTCAGAGGSTAKGNNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAATGCCGCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTTTTTATAAGAATGAACTGGAATTTTGAAGGTCAATATCCTCAAAACATTTGGAATGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GNASTRRITYTWRWKWMCKRKSARARATRGRARYMRAWYTAWARRTGWTKAMAYAAWTMN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGTATCTAAACTTCC 203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KWRIGIRWWIKINNNAIGIRWWIGYWMINNNGCSIMIWARRYKIRRWWCYIAMWYGASWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RCYARRWGKWTTAYYMTATKWGTTGWAWRTWRWAAMKKTRKWMCSTAMNNAWTTMCTAR
                                                                                   WTCKAWMKAWATGAATTTNA
                                                                                                               TCATTTATAAAAGAGGTACA 821
                                                                                                                                                                                                                                        TMWTININININAGTWTININININIAKMASAATWYAAAAMTAATKYARTANTTAMAGAYARAAA
                                                                                                                                                                                                                                                                                                       AGAAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAGATTACCTGATGGCAGAATA
                                                                                                                                                                                                                                                                                                                                       NNINNNCCAATCARWKCTAASAACAMANATTCYCTYAANNATYTWANNATGCWNATKTAA
                                                                                                                                                                                                                                                                                                                                                                      ATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAATTATATTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACTGGGAAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KACTWTTYKRCCTTANNTAAWYTKSSANCTSRTTRWKTNCWRAGSKTASMGRAYARAYWT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KTCTMNNTTAAKATTYWATCYWKSMTNGTSYRYAAARYTWYAWWTRRYAYANNNNTKTTW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATTATTAGCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NGTTCWTRMWAWTWKWWMKTKGTTTWNNNGGRTYTGWTTKKMATTTTAKANNCTTAAWKW 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAMGMTWNNNNNNNTTTTKAAMYAAARWMWWSATTTWWAAAWTSRKTWTYYGRKTAMNNN 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGATGACTATTA--TAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGAATATATGTCT 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGAATATCGAGCTAA
                                                                                                                                             ANCGTNINNNNNNNAYATTTNTATTTTWWRTRKANNNNNNNAAAYYGAAAWKUNTTMC
                                                                                                                                                                            AATAACAAATCTAGGAATGGATTTTCTAATATGGAAGGGGGCTGCAAAACAAAGTATAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGATATGGCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative 175; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 51; DB 4; Length 1055
Pred. No. 0.0035;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         458;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     promoters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                      583
                                                                                                                                              823
                                                                                                                                                                                                                                                                                                         681
                                                                                                                                                                                                                                                                                                                                       643
                                                                                                                                                                                                                                                                                                                                                                      621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           163
                                                                                                                                                                                                                                                                        703
                   밁
```

Application US/09806708B

715 NNAGTWKNNNNNAKNASAAKNYÄÄAAVKÄÄKKHWRWANKWAMRGWHÄDÄAABTTDKRNN

```
TYPE: DNA
FRANTSM: Artificial sequence
FEATURE:
NAME/KEY: promoter
LOCATION: (1)..(1141)
OTHER INFORMATION: consensus sequence
US-09-806-708B-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                          뮍
                                                                      ঠ
                                                                                                                       닭
                                                                                                                                                             δ
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                             닭
                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No. 6784342
GENERAL INFORMATION:
APPLICANT: The University of British Columbia
TITLE OF INVENTION: Regulation of Embryonic Transcription in Plants
FILE REFERENCE: 4810-58741
CURRENT APPLICATION NUMBER: US/09/806,708B
CURRENT FILING DATE: 2001-04-03
PRIOR APPLICATION NUMBER: US 60/147,133
PRIOR APPLICATION NUMBER: US 60/147,133
PRIOR FILING DATE: 1999-08-04
NUMBER OF SEQ ID NOS: 23
SOFTWARE: PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 5.0%; Score 50.6; DB 4 Best Local Similarity 11.5%; Pred. No. 0.0046; Matches 101; Conservative 313; Mismatches 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 22
LENGTH: 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             175 WDDDTKYHMWNNNGCBTVTWMVRYKTDRDWSBKRMNYGMBWWKNWSYDVTYYWWVWDDMC
                                                                                                                                                                                                                                                                                                                                       524 TATTTACCTTATCTGCTGTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTACA
                                                                                                                                                                                                                                                                                                                                                                                 415 WKMDMDWBGTYNNNNNGGRTYYGWTKNKKMWTYYKWKANNCKWRAWDHKTCTHNNTTWWK
                                                                                                                                                                                                                                                                                                                                                                                                                           355 WTYKKARHBARWDWVWHSAWKKWHANAAHYSRKKWTBYKRKTMVNNNNGTTMWKRMWAWY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             404 TGAGTGCTTATTCAGATGACGATAAATTATTAGCACTATATTTTTTTCTCTGTACAGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         295 WGWNRABVNSTCTTWKSKTTKVRTSCWANNCRAGDANKDHKWWKWSAAMGVYWNNNNNNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 344 ATTTTGAAGGTCAATATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   115 TNKWGKTGWRHRYWRWRAMBDTVDHHYVTAMNNAWTTMCMMDKDDKRTRWWWKKNNNATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         165 TTTGGCTGTAAGTGGTATTCATAATGTATCTAAACTTCCTGATGA-CTATTATAAGAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             105 GGGTCATACAGCATCATATGGAATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   55 KSRKWTWARMYCKYRRWYNNKSRWWKGWYKKKWYBCANNTSBRYHARRWKDMKTAYBMTM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGATTAGAGGCTAAATCATTAGAGAATTATATTGAGAGAAAAAAACTTTCTAAACCTT
                                                                                                                                                                   TCTTTCGACCACCGCAGAGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAACAG
TTTCTAATATGGAAGGGGCTGCAAAACAAAAGTATAGTTCATTTATAAAAGAGGTACAAA 823
                                                                               AAGCGCCTAAATGGAGAGTGAGTTTTAAAGAACTTAAAAATAACAAATCTAGGAATGGAT
                                                                                                                           BWSHTWBHBRAGAAHYWMBMMYBAKCHCMKAWYKAKKYAGAGGSNNNNNNNNNNNNNNNNNN
                                                                                                                                                                                                           KWWNNYAAWYTKSSWNYTSRYYRWKTNNSWRWRSDTRSMGRANNYARABHYGYKWNTRWW
                                                                                                                                                                                                                                                                                               MKTYWNNCYWKSMTNGKSHRBAAAVYTWYMWWWRRYAHANNNNWDYWWKACTWYKYBVCS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KRKVRRWVRTRGRMRNYMVAWBŤÁHRRRYNNGWTBÁMAYRRWŤMNNNNNÁKAMCKRAKY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGAGACTGCTGAGAGAATTTATCAAGAATATATGTCTAATCTTCATCTGCACTATTAG
                                          ATCARDDYYAASRWYAMANAKWYYYKBAANNAYYTHANNWWGCWNNATDTRRTMWKNNNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of A.t., L.a., and B.n.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       459;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 1141;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FAE1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               promoters
                                                                                                                                                                                                                                                                                                                                                                                 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               463
                                                                                                                           654
                                                                                                                                                                   703
                                                                                                                                                                                                                                                     643
                                                                                                                                                                                                                                                                                                                                         583
                                                                                                                                                                                                                                                                                                                                                                                                                           523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               164
                                                                                                                                                                                                             594
                                                                                                                                                                                                                                                                                               534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ν
```

```
Ś
                                                                                                                                            밁
                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
US-09-601-198-153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                         S
                                                                 밁
                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                          뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Ureaplasma urealyticum US-09-601-198-153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 153, Application US/09601198 Patent No. 6531583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: NUCLEIC ACID PROBES AND METHOD FOR DETECTING UREAPLASMA FILE OF INVENTION: UREALYTICUM FILE REFERENCE: UAB-13452/22 CURRENT APPLICATION NUMBER: US/09/601,198 CURRENT FILING DATE: 2000-12-08 PRIOR APPLICATION NUMBER: 60/073,189 PRIOR APPLICATION NUMBER: 60/073,189 PRIOR FILING DATE: 1998-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Cassell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 1866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1097
                                                                                                                                              1337
                                                                                                                                                                                                                              1277
                                                                                                                                                                                                                                                                                                            1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1037 АТGAAAAAAACAACAAAATAAGAATTATTTTAGATCTTTTGATAAAGAATTGAATTATT 1096
                                                                                                                                                                                                                                                                                                                                                                                          1157 ATATTACACAAAAATAATTAAAAATCTTTTATTAGATGCTTTCAATAATAATGATGTTC 1216
                                                                                                      474
                                                                                                                                                                                                                                                                  359
                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         122 ATGGAATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTA 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    894 AWMKWDATKMNNATTYNRGTAWRTNNNNNNMTMKT 928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     249;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Glass, Jennifer S.
Glass, John I.
Heiner, Cheryl R.
Lefkowitz, Elliot
ATCTGCTGTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTTACAATGGATTAGA 593
                                                                                                                                                                                                                                                                                                                                                AAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAAT 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAATTGCCGAATAATTTATATAGTGTGAGGCTAAGCCAAAAAGACAGGGTAACCTTTA 943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAYTKYTTINNNNTYRGVVINTAARDGWANNNNNNNNNNNNNNNGWSD-MWVTWWAYANYG
                                                                                                    --ATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCAAAAATATTGATCATAATTTAGATATTAATATTAATAAAAATTTCAAAGGAAGCAT 1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCAAAATGATACTGACAATACAATGACGGTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TINININININININAYAWWTIKWYYTTODRWRBAYTINININININAYYGAYADDYAYYMSDTCD
                                                               TGAATTTAAAGCA--CTTTGAATTAAGTTTTAATAATTGATTTACCTTTACCAAAACAAAT 1454
                                                                                                                                                                                  ATGACGATAAATT-----ATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGA 473
                                                                                                                                                                                                                          AATTAATAGAATTTAGTAATTATTTTAAAAAACCAAAAAACACCAAGAGATTCTAATGAAT 1336
                                                                                                                                                                                                                                                                ATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAG 418
                                                                                                                                                                                                                                                                                                        TTCATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGA-
                                                                                                                                            ATAAGCAAAATTAAATGATTATGAAAAATATTTTCACAAAATTGGTATTTTATTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGGTAACGCTCCACAGACAGCAGCGAAAAGTATTGGTACAGCCAGTGGCAGTAACCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chen, Ellson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.8%;
ilarity 47.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , Gail H.
Fllson Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 48.8; DB 4;
Pred. No. 0.016;
0; Mismatches 267;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 4; Length 1866;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         883
```

```
; FEATURE:
; NAME/KEY: promoter
; LOCATION: (1)..(1055)
; OTHER INFORMATION: consensus sequence of A.t.
US-09-806-708B-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: DNA; ORGANISM: Staphylococcus US-09-134-001C-1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 12
US-09-134-001C-1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-806-708B-23/c
                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 13
                                                                                                                                                                                                                                                                                               Sequence 23, Application US/09806708B
Patent NO. 6784342
GENERAL INFORMATION:
APPLICANT: The University of British Columbia
TITLE OF INVENTION: Regulation of Embryonic T.
FILE REFERENCE: 4810-58741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 5674
SEQ ID NO 1161
LENGTH: 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1161, Application Patent No. 6380370 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 106;
                                                                                                                                                           SEQ ID NO 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                 CURRENT FILING DATE: 2001-04-03
PRIOR APPLICATION NUMBER: US 60/147,133
PRIOR FILING DATE: 1999-08-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/134,001C CURRENT FILING DATE: 1998-08-13 PRIOR APPLICATION NUMBER: US 60/064,964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/806,708B CURRENT FILING DATE: 2001-04-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1997-11-08
PRIOR APPLICATION NUMBER: US 60/055,779
PRIOR FILING DATE: 1997-08-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: GTC-007
                                                                                                                                                                                 SOFTWARE:
                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 23
                                                                                               LENGTH: 1055
TYPE: DNA
ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1515 ACTTAAACCATATGAGGATTATTATTTCATTAATAATTATTTAGAA 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 536 ATANATATTATTACTCAATTCATTTTGATGATTCAGTTTCACAAGAGATGATTAACGATA
                                                                                                                                                                                 PatentIn version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAATCCTATTACTAAAGAGATGTTAGGACCAAGTGAAAAATATTTAAAAAAGGTTAAAAAA 1514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTACGCTAAGATTATTATGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACATTTTGGAATGTTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGAATATATGTCTAATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCTAAATCATTAGAGAATTATATTGAGAGAAAAAACTTTCTAAA 639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCTTGAAAATAAACCATTGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGATATGGCAAATGGTT 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           epidermidis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/09134001C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 47.8; DB 3; Pred. No. 0.02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             408
                                                                                                                                                                                                                                                                                                                        Transcription in Plants
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97;
                        and L.a.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 729;
                    FAE1 promoters
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STAPHYLOCOCCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   595
```

```
RESULT 14
US-08-956-171E-531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 154
                                                                                                                                                                                                                                                                                                                                                                              Sequence 531, Applicat Patent No. 6593114 GENERAL INFORMATION:
NUMBER OF SEQUENCE CORRESPONDENCE ADDRESS:
ADDRESSEE: Human Genome Sciences,
                                                                                                                            Patrick S. Dillon
Craig A. Rosen
Steven C. Barash
Michael R. Fannon
TITLE OF INVENTION: Staphylococcus
NUMBER OF SEQUENCES: 5256
                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Charles Kunsch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                154;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | : | | :::|: || | | ::| :: | : | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::| | ::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAACTTAAAAATAACAAATCTAGGAATGGATTTTCTAAT 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MYTAGKAAWTNNKTASGKWMYAMMKTTWYWAYWTWCAACWMATAKRRTAAKMCWYYTRGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NNNKTAMYCRRAWAMYSAWTTTWWAAATSWWKWYTTTRKTTWAAAANNNNNNWAKCKTT 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WAAMANNNITRTRYYAWWTRWARYTTTRYRSACNAKSMWRGATWRAATMTTAANNKAGAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACAT 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATTGGTGATCAAATTTTCTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NNNCMTASCCTCTGACTAATTATGRGATSAKKRKTAWTTCTYRRRWAWGWRTWTANWMRC 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTAMATNWGCATNNTWARATNNTTRAGRGAATNTKTGTTSTTAGMWYTGATTGGNNNNNN 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTYTRTCTKTAANTAYTRMATTAKTTTTRWATTSTKMTNNNNNAWACTNNNNNNAWKA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATAAAYWTWGTCNNNNNNNNNNNNNTWCYTTTANAYKCCAANNAAAAAAGTCNNTAYAAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATAT 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TWSTCRWKTARGWWYYAMRYYTWAK-ASGCNNNAKWRCAWWYACATNNNAMAWWYACAYW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAGATTACCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NKAWTTRTKIMAWCAYYTWTARWTYKRYTYCYATYTYTSMYMGKWMWYWARAAYYASTNC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SAMWAMWMMATWCTCGARTWGGATYMAAACCTAAGAGNSMTYWCWAATYMGTTMTNNNNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MMWTTAAGNNTMTAAAATKMMAAWCARAYCCNNNWAAACMAMKWKMWAWTWKYAWGAACN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AWRTYTRTYCKSTAMSCTYWGNAMWYAAYSAGNTSSMARWTTANNTAAGGYMRAAWAGTM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGA 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGT 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGA 131
                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/08956171E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative 176; Mismatches 429;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.7%; Score 47.6; DB 4; 20.3%; Pred. No. 0.025;
                                                                                                                                                                                                                                                                                                                     Choi
                                                                                                                                                                  aureus
                                                                                                                                                                  Polynucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1055;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1:
                                                                                                                                                                  and
                                                                                                                                                               Sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                      CITY:
STATE:
                                                                                                                               STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               313
```

```
US-08-781-986A-531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-08-956-171E-531
                                                                                                      Sequence 531, Application US/08781986A
Patent No. 6737248
GENERAL INFORMATION:
APPLICANT: Charles Kunsch
TITLE OF INVENTION: Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 138; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (240)
TELEFAX: (301) 3(
INFORMATION FOR SEQ ID NO:
                                                             CORRESPONDENCE ADDRESS:
                                                                                   NUMBER OF SEQUENCES:
                                             ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/009,861
FILING DATE: January 5, 1996
APPLICATION NUMBER: 08/781,986
FILING DATE: January 3, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Mark J. Hyman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb
COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2
SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear SEQUENCE DESCRIPTION: SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELECOMMUNICATION INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                  306 TAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGT
                                                                                                                                                                                                                                                                                                      553 AAAACAAGGAACATACGCTTTTATTAAGAAAGAAGATTCTATTAAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                        246 TCAAGAATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              433 CATAGGAGAAGAATTATATGATGACATATTGCATGAAGAAGTATTTTTTAAAGAAGACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         186 TAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             126 AATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   66 AGATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGG 125
                                                                                                                                                                                                                                                                                                                                                                                          AACGCCATCAAATGCTGATTTTTGTATTTTAGTTAATGGTGATTCAATGGAACCTATGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAAAACGTACTTAACTACGCAAATGAGCAATTAGATGAACAGAATAAAGTCACTTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGATGAATATAAAGAGTCTAAACTAGTATCGTATATTGCATGTGCTGCAACTGGTGCTGC
Rockville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 942 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 46, REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: US/08/956,171E FILING DATE: 20-Oct-1997 CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 9410 Key
CITY: Rockville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: Maryland
                  9410 Key West Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                           Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rockville
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.78;
                                           Genome Sciences,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (240) 314-1224
                                                                                   Staphylococcus aureus 5255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 309-8439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    West
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 47.4; DB 4;
Pred. No. 0.027;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46,789
BER: PB248P1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ŏ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           531:
                                                                                                            Polynucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 942;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                      601
                                                                                                               and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                          Sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
```

```
PRIOR APPLICATION: 435
PRIOR APPLICATION NUMBER:
PILING DATE:
PILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: BENSON, Bob
REGISTRATION NUMBER: 30,446
REFERENCE/DOCKET NUMBER: PB248
TELEPHONE: (301) 309-8504
TELEPHONE: (301) 309-8504
TELEPHONE: (301) 309-8512
INFORMATION FOR SEQ ID NO: 531:
SEQUENCE CHARACTERISTICS:
LENGTH: 942 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
US-08-781-986A-531
                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뮍
Search completed: March
Job time : 221 secs
                                                                                                                                      Ś
                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 4.7%; Score 47.4; DB 4; Length 942; Best Local Similarity 47.8%; Pred. No. 0.027; Matches 138; Conservative 0; Mismatches 151; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY: USA
ZIP: 20850
COMPUTER READABLE FORM:
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.4Mb storage
COMPUTER: HP Vectra 486/33
OPERATING SYSTEM: MSDOS version 6.2
SOFTWARE: ASCII Text
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/781,986A
FILING DATE:
                                                                                              553
                                                                                                                                         306 TAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGT 354
                                                                                                                                                                                           493 AACGCCATCAAATGCTGATTTTTGTATTTTAGTTAATGGTGATTCAATGGAACCTATGTT 552
                                                                                                                                                                                                                                        246 TCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTC 305
                                                                                                                                                                                                                                                                                       433 CATAGGAGAAGAATTATATGATGACATATTGCATGAAGAAGTATTTTTTAAAGAAGACGA 492
                                                                                                                                                                                                                                                                                                                        186 TAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTA 245
                                                                                                                                                                                                                                                                                                                                                                                      373 AGATGAATATAAAGAGTCTAAACTAGTATCGTATATTGCATGTGGTGCAACTGGTGCTGG 432
                                                                                                                                                                                                                                                                                                                                                                                                                       126 AATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCA 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313 AĞAAAACĞTACTTAACTACGCAAATGAĞCAATTAĞATĞAACAGAATAAAĞTCACTTCTAT 372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66 AGATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGG 125
                                                                                              AAAACAAGGAACATACGCTTTTATTAAGAAGAAGATTCTATTAAAGAT 601
                      1, 2005, 06:54:52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PB248PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IDENTITY NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  March 1, 2005, 02:23:47; Search time 4591 Seconds (without alignments) 8963.108 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             45554873 seqs, 20411521753 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-617-962-2
1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pending_Patents_NA_Main:*
/cgn2_6/ptodata/1/pna/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     atggttatacaattaacacc.....ctcattataaaaatatatga 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                             /cgn2
##2-6/ptodata/1/pna/USO7-COMB. seq: *
##2-6/ptodata/1/pna/USO7-COMB. seq: *
##2-6/ptodata/1/pna/USO8-COMB. seq: *
##2-6/ptodata/1/pna/USO9-COMB. s
```

```
44: / cgm2_6/ptcodata/1/pna/19399F_COMB.seq;
46: / cgm2_6/ptcodata/1/pna/19399F_COMB.seq;
47: / cgm2_6/ptcodata/1/pna/193100B_COMB.seq;
48: / cgm2_6/ptcodata/1/pna/193100B_COMB.seq;
48: / cgm2_6/ptcodata/1/pna/193100B_COMB.seq;
59: / cgm2_6/ptcodata/1/pna/193101B_COMB.seq;
59: / cgm2_6/ptcodata/1/
```

Photor

```
117.
1118.
1120.
120.
121.
1221.
123.
123.
125.
126.
127.
128.
: /cgm2_6/ptodata/1/pna/US6047_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6048_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6049_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6050_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6050_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6051_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6052_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6052_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6055_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6056_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6056_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6056_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6056_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6056_COMB.seq:*
    /cgm2_6/ptodata/1/pna/US6056_COMB.seq:*
```

Pred. No. is th score greater t and is derived is the number of results predicted by chance to have a ster than or equal to the score of the result being printed, rived by analysis of the total score distribution.

SUMMARIES

Result No. 00000 O O \$\begin{array}{c} 6.6 & Score 100.0 1008 65.9 1205 65.9 7218 65.9 7218 65.9 7218 65.9 7218 65.0 189971 65.0 1145 65.0 1145 65.0 1145 65.0 1145 65.0 1145 65.0 118971 65.0 1145 64.8 1156 64.8 1751310 64.7 729 64.7 729 64.7 729 64.7 729 64.7 729 64.7 720 65.8 720 66.9 720 66.9 720 67.9 7 Query Length 58 US-10-617-962-2 58 US-10-617-962-3 58 US-10-617-962-3 58 US-10-617-962-3 6 10 US-08-466-194-14 7 1 PCT US-92-26796-234 6 50 US-10-240-23-96 6 50 US-10-240-43-3-95 6 50 US-10-266-090-23-96 6 50 US-10-266-090-23-96 7 41 US-99-26796-23-8 7 10 US-99-26796-23-8 7 10 US-99-26796-23-8 7 10 US-09-947-911-2 7 10 US-09-947-913-2 7 10 US-09-947-913-2 7 10 US-09-947-914-4 7 10 US-09-947-914-3 7 10 US-10-391-533-23 7 10 US-10-391-533-23 7 10 US-10-902-441-1161 7 10 US-09-468-933-309 7 10 US-10-902-441-1161 7 10 US-09-468-933-309 7 10 US-10-902-411-1161 7 10 US-10-859-198-133-309 7 10 US-10-902-411-1161 8 10 US-10-859-198-133-309 8 10 US-10-902-918-33-309 9 12 US-10-311-455-597 9 13 US-10-389-198-3701 9 14 US-10-859-198-133-309 9 15 US-10-389-198-33-309 9 17 US-60-475-871-3701 9 18 US-10-389-198-33-309 9 18 US-09-407-804A-10 9 18 US-09-407-804A-10 9 18 US-09-407-804A-10 9 18 US-09-355-2713-309 9 18 US-09-355-2713-309 9 18 US-09-355-2713-2103 9 18 US-09-335-2713-2103 DB ä Sequence 2, Appli Sequence 14, Appli Sequence 14, Appli Sequence 234, Appli Sequence 234, Appli Sequence 234, Appli Sequence 231, Appli Sequence 23096, Appli Sequence 230, Appli Sequence 11520, Appli Sequence 1157, Appli Sequence 137, Appli Sequence 137, Appli Sequence 133, Appli Sequence 238, Appli Sequence 238, Appli Sequence 238, Appli Sequence 231, Appli Sequence 231, Appli Sequence 3161, Appli Sequence 313, Appli Sequence 313, Appli Sequence 313, Appli Sequence 313, Appli Sequence 3130, Appli Sequence 3131, Appli Sequence 3131, Appli Sequence 3131, Appli Sequence 3131, Appli Sequence 531, Appli Sequence 53, Appli Sequence 10, Appli Sequence 11, Appli Sequence 10, Appli Sequence 10, Appli Sequence 10, Appli Sequence 10, Appli Sequence 11, Appli Sequence 10, Appli Sequence 10, Appli Sequence 10, Appli Sequence 10, Appli Sequence 11, Appli Sequence 11, Appli Sequence 10, Appli Sequence 10, Appli Sequence 11, Appli Sequence 1 Description Sequence 1038, Ap Sequence 2102, Ap Sequence 55, App

```
ALIGNMENTS
```

```
Sequence 2, Application US/10617962

Sequence 2, Application US/10617962

GENERAL INFORMATION:

APPLICANT: Commonwealth Scientific and Industrial Research Organisation APPLICANT: EAST, Peter David

TITLE OF INVENTION: Toxin Genes from the Bacteria Xenorhabdus nematophilus a TITLE OF INVENTION: Luminescens

FILE REFERENCE: 050179-0076

CURRENT APPLICATION NUMBER: US/10/617,962

CURRENT FILING DATE: 2003-07-14

PRIOR APPLICATION NUMBER: US/99/463,048A

PRIOR APPLICATION NUMBER: US/09/463,048A

PRIOR FILING DATE: 1998-07-17

PRIOR APPLICATION NUMBER: PO 8088

PRIOR FILING DATE: 1997-07-17

NUMBER OF SEQ ID NOS: 20

SOFTWARE: Patentin version 3.1

SEQ ID NO 2

LENGTH: 1008

TYPE: DNA

CRGANISM: Photorhabdus luminescens

US-10-617-962-2
                                                                                                                                               В
                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                δ
                                         음 성
                                                                                           유
                                                                                                                                                                      중 유
                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1
US-10-617-962-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 100.0%; Score 1008; DB 58; Best Local Similarity 100.0%; Pred. No. 2.1e-211; Matches 1008; Conservative 0; Mismatches 0;
                                                                                                   481
                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                   301
                        601
                                                                                                                             481
                                                                                                                                                       421
                                                                                                                                                                               421
                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGGAGATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGGAGATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCA
                GACGATAAATTATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAAT
                                                                                                                                                                                                                     CCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGAT
                                                                                                                                                                                                                                                                        ATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATAT
                                                                                                                                                                                                                                                                                                                           ATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAA
                                                                                                                                                                                                                                                                                                                                                                               ATTCATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGCTGCTGCTGAGAGA
                                                                                                                                                     GACGATAAATTATTAGCACTATATTTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAAT
                                                                                                                                                                                                       CCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGAT
                                                                                                                                                                                                                                                            ATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATAT
                                                                                                                                                                                                                                                                                                              ATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAA
                                                                                                                                                                                                                                                                                                                                                                ATTCATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGA
Xenorhabdus nematophilus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                        660
                                                600
                                                                          600
                                                                                                   540
                                                                                                                             540
                                                                                                                                                        480
                                                                                                                                                                                                         420
                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                  Ś
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2
US-10-617-962-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                       S
                                                                     밁
                                                                                                    Ś
                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 050179-0076

CURRENT APPLICATION NUMBER: US/10/617,962

CURRENT FILING DATE: 2003-077-14

PRIOR APPLICATION NUMBER: US/09/463,048A

PRIOR FILING DATE: 2002-12-13

PRIOR APPLICATION NUMBER: PCT/AU98/00562

PRIOR FILING DATE: 1998-07-17

PRIOR FILING DATE: 1998-07-17

PRIOR APPLICATION NUMBER: PO 8088

PRIOR APPLICATION NUMBER: PO 8088

PRIOR FILING DATE: 1997-07-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/10617962 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Xenorhabdus nematophilus
-10-617-962-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Commonwealth Scientific and Industrial Research Organisation
APPLICANT: EAST, Peter David
TITLE OF INVENTION: Toxin Genes from the Bacteria Xenorhabdus nematophilus and Photor
TITLE OF INVENTION: luminescens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
297
                              252
                                                                   237
                                                                                                    192
                                                                                                                                        177
                                                                                                                                                                         132
                                                                                                                                                                                                           117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                  835;
                                                                                                                                                                                                                                            72
                                                                                                                                                                                                                                                                             57
                                                                                                                                                                                                                                                                                                                12
                                                                                                                                                              ATATCGAGCTAAGAAAATAATATTAGCTTTACGCTTTTGGCTGTAAGTGGTATTCATAATGT
                                                                                                                                                                                                          AATACGTGTACTAGAATTCAAGCAAACAAATGAAAGTCATACAGGATTGTATGGAATTGC 176
                                                                                                                                                                                                                                AGTACGTATACTAAACTTTAAGCAAACAGATGAGGGGTCATACAGCATCATATGGAATTGA 131
                                                                                                                                                                                                                                                                             AGTAACGCCTGATGATAAAGGTGAATATCAACCCGTTGAAAAAGCAAATAGCGGGAGATAT 116
                                                                                                                                                                                                                                                                                                 ATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATACATGACGGTTCATAGTGTTGGAACTCATTATAAAAATATATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AATACAATGACGGTTCATAGTGTTGGAACTCATTATAAAAATATATGA 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTATTAGTGTGAGGCTAAGCCAAAAAGACAGGGTAACCTTTACTCAAAATGATACTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGCAGCGAAAAGTATTGGTACAGCCAGTGGCAGTAACCTGGAAAAAATTGCCGAATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTGCAAAACAAAAGTATAGTTCATTTATAAAAAGGGTACAAAAAGGGTAACGCTCCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTGCAAAACAAAAGTATAGTTCATTTATAAAAGAGGTACAAAAAGGGTAACGCTCCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGAGTTTTAAAGAACTTAAAAATAACAAATCTAGGAATGGATTTTCTAATATGGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGAGTTTTAAAGAACTTAAAAAATAACAAATCTAGGAATGGATTTTCTAATATGGAAGGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGGGCCCTAAATGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAAATGGAGA
                    ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATGATGATATTTCTAAAGA 311
                                                                                         ATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGA
                                                                     CTCTCAACTTCCAGAAGACTATTATAAAAAATAAGGATAACACAGGTAGAATTTATCAAGA
                                                                                                                                        ATATCGAGCTAAGAAAGTAATAATAGCATATGCTTTAGCGGTAAGTGGTATTCATAATGT
                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                65.9%; Score 663.8; DB 58, 79.4%; Pred. No. 1.4e-135; tive 0; Mismatches 162;
                                                                                                                                                                                                                                                                                                                                                                                   DB 58;
                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                   Length 1107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1008
                                                                                                                                                                                                                                                                                                                                                54; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                   296
                                                                                                                                                                         191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                    251
                                                                                                                                        236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                             RESULT 3
US-10-617-962-5
                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                             TITLE OF INVENTION: Toxin Genes from the Bac
TITLE OF INVENTION: luminescens
FILE REFERENCE: 050179-0076
CURRENT APPLICATION NUMBER: US/10/617,962
CURRENT FILING DATE: 2003-07-14
PRIOR APPLICATION NUMBER: US/09/463,048A
PRIOR FILING DATE: 2002-12-13
PRIOR APPLICATION NUMBER: PCT/AU98/00562
PRIOR FILING DATE: 1998-07-17
PRIOR APPLICATION NUMBER: PCT/BUSS/00562
PRIOR APPLICATION NUMBER: PCT/BUSS/00562
                                                                                                                                                                                                                                                           Sequence 5, Application US/10617962 GENERAL INFORMATION:
                                                                                                                                                                                                                        APPLICANT: Commonwealth Scientific and Industrial Research Organisation APPLICANT: EAST, Peter David
PRIOR FILING DATE: 1997-07-17
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PatentIn version 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                          1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         312
                                                                                                                                                                                                                                                                                                                                                                                                       978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACAGCCAGTGGCAGTAACCTGGAAAAATTGCCGAATA---ATTTATATAGTGTGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TIGGAAIGTICCIGAGCTIGAAAATAAACCATIGAGIGCITATICAGAIGACGAIAAATI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACAT 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCCAAAAAGACAGAGGGTAACCTTTACTCAAAATGATACTGACAATACAATACAATGACGGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAATAACAAATCTAGGAATGGATTTTCTAATATGGAAGGGGCTGCAAAACAAAAGTATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGAGCTAAATCATTAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGAACTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATGGCAAATGATTTTACCCCAGAACGAACTGGAGTTTGGAGGTCAACGTCTTAAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                       TAGTGTTGGAACTCATTATAAAAATATATGA 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACAAAAAGCGGCAGTAACTTCGAAAAACTGCAAGGTAGAGATTTATATAGTATAAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCATTTATAAAAGAGGTACAAAAGGGTAATGATCCACGTGCAGCAGCAGCAAGTATTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGATAACCCATCCAGAAATACATTTATGAAAATGGATGATGCTGCAAAACGAAAATATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGCAGAACAGGCTACTTGGCCGGTCCAACAAAAGCGCCTAAATTGCCAACAACGTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTATATTGAGAGAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAAGTTACCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAGATTACCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGAAAAAGGATTTTTTCAAAAAATTTTTACAATGGTCTAGAAACTAAATCATTAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTAGCACTATATTTCTTTGCTTCACAAGAACTTCCAATGGAGGCAAATCAACAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGGATATTCCTGATCTTGAGAATAAACTATTGGAAGATTATTCAGATGAAGATAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCCAAGAACACAGGGTAACATTCTCCATAAATAATACTGACCAAATAATGGAGATCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAAA------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCAGCAAATTTTTTTAAAGTAATTGATTTTTTACTTATCTTATCTGCTGTAACATCACT
 version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----TGGAGAGTGAGTTTTAAAGAACTTAA
                                                                                                                                                                                                           Bacteria
                                                                                                                                                                                                                                                                                                                                                                      1107
                                                                                                                                                                                                          Xenorhabdus nematophilus and
                                                                                                                                                                                                                                                                                                                                                                                                                                            1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   714
```

Photor

```
Š
                                                                            Ş
                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                      밁
                                                                                                             밁
                                                                                                                                 Ś
                                                                                                                                                           밁
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                  뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA
; ORGANISM: Xenorhabdus nematophilus
US-10-617-962-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 835; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q ID NO 5
LENGTH: 1205
                                                                                                                                                                                                                                                                               673
                                                                                                                                                                                                                                                                                                                                                                                          553
 973
                           861
                                                      913
                                                                                 801
                                                                                                             853
                                                                                                                                        741
                                                                                                                                                                                                                        733
                                                                                                                                                                                                                                                     672
                                                                                                                                                                                                                                                                                                          612
                                                                                                                                                                                                                                                                                                                                     613
                                                                                                                                                                                                                                                                                                                                                              552
                                                                                                                                                                                                                                                                                                                                                                                                                    492
                                                                                                                                                                                                                                                                                                                                                                                                                                              493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253
                                                                                                                                                                   793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      73
              TACAGCCAGTGGCAGTAACCTGGAAAAATTGCCGAATA---ATTTATATAGTGTGAGGCT
                                                                                                                                                                                                                                                                                                                                 GGGAAAAAGGATTTTTCAAAAAATTTTTACAATGGTCTAGAAACTAAATCATTAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCTCAACTTCCAGAAGACTATTATAAAAATAAGGATAACACAGGTAGAATTTATCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATAT
                                                      TTCATTTATAAAAGAGGTACAAAAGGGTAATGATCCACGTGCAGCAGCAAGTATTGG
                                                                    AGATAACCCATCCAGAAATACATTTATGAAAATGGATGATGCTGCAAAACGAAAATATAG
                                                                                                                              AAATAACAAATCTAGGAATGGATTTTCTAATATGGAAGGGGCTGCAAAACAAAAGTATAG
                                                                                                                                                                TGGCAGAACAGGCTACTTGGCCGGTCCAACAAAAGCGCCTAAATTGCCAACAACGTCTTC 792
                                                                                                                                                                                                                                               TGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAAA------
                                                                                                                                                                                                                                                                            TTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAAGTTACCTGA
                                                                                                                                                                                                                                                                                             TTATATTGAGAGAAAAAAACTTTCTAAACCTTTCTTTCGACCACCGCAGAGATTACCTGA
                                                                                                                                                                                                                                                                                                                                                        GGGAAGGAGGATTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAA 611
                                                                                                                                                                                                                                                                                                                                                                                         TGCAGCAAATTTTTTTAAAGTAATTGATTTTTTACTTATCTTATCTGCTGTAACATCACT
                                                                                                                                                                                                                                                                                                                                                                                                       TGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGCAACTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTAGCACTATATTTCTTTGCTTCACAAGAACTTCCAATGGAGGCAAATCAACAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGGATATTCCTGATCTTGAGAATAAACTATTGGAAGATTATTCAGATGAAGATAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATGGCAAATGATTTTACCCAGAACGAACTGGAGTTTGGAGGTCAACGTCTTAAAAATAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATEGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACAT 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATACATGTCTAATCTTTATCTGCACTATTGGGTGAGAATGGTGATCAAATTTCTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATTGGTGAACATTTCTAAAGA 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCGAGCTAAGAAAGTAATAATAGCATATGCTTTAGCGGTAAGTGGTATTCATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGT 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATACGTGTACTAGAATTCAAGCAAACAAATGAAAGTCATACAGGATTGTATGGAATTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGA 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTAACGCCTGATGATAAAGGTGAATATCAACCCGTTGAAAAGCAAATAGCGGGAGATAT
TACAAAAAGCGGCAGTAACTTCGAAAAACTGCAAGGTAGAGATTTATATAGTATAAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        65.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 663.8; DB 58;
Pred. No. 1.5e-135;
0; Mismatches 162;
                                                                                                                                                                                 ----TGGAGAGTGAGTTTTAAAGAACTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           54;
                                                                                                                                                                                            740
                                                                                                                                                                                                                                                                                                         671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        432
                         917
                                                                                                                                                                852
                                                                                                                                                                                                                                                                             732
                                                                                                                                                                                                                                                                                                                                    672
                                                                                                                                                                                                                                                                                                                                                                                                                   551
                                                                                                                                                                                                                                                                                                                                                                                                                                             552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     312
                                                                              860
                                                                                                           912
                                                                                                                                     800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               251
                                                      972
                                                                                                                                                                                                                                                                                                                                                                                         612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      132
                                                                                                                                                                                                                                                 714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2
```

```
SEQUENCE 14, Application US/08466194

GENERAL INFORMATION:
APPLICANT: DCHNER, F.
APPLICANT: SCHEIFLINGER, F.
APPLICANT: FALKNER, F. G.
TITLE OF INVENTION: RECOMBINANT FOWLPOX VIRUS
NUMBER OF SEQUENCES: 52
CORRESPONDENCE ADDRESS:
ADDRESSEE: Foley & Lardner
STREET: 3000 K Street, NW, Suite 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
US-08-466-194-14/c
片
                        Ş
                                                                 멁
                                                                                               δ
                                                                                                                                                                                                       ; CLONE: p'
US-08-466-194-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                  Query Match
Best Local S
Matches 25
                                                                                                                                                                                                                                                                           INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 7218 base pair
                                                                                                                                                                                                                                                                                                                                                                                                     PILING DATE: 22-APR-1994
PRICR APPLICATION DATA:
APPLICATION NUMBER: US 07/935
PILING DATE: 26-AUG-1992
PRIOR APPLICATION NUMBER: EP 91 114
APPLICATION NUMBER: EP 91 114
PILING DATE: 26-AUG-1991
ATTORNEY/AGENT INFORMATION:
NAME: BENT, Stephen A.
REGISTRATION NUMBER: 29,768
REFERENCE/DOCKET NUMBER: 3047
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ve.
CURRENT APPLICATION NUMBER: US/08/466,194
FILING DATE: 06-JUN-1995
PRIOR APPLICATION NUMBER: US/08/232,463
APPLICATION NUMBER: US/08/232,463
                                                                                                                                                                                                                                     IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STATE: [
                                                                                                                                y Match
5.9%; Score 59.8; DB 10;
Local Similarity 6.0%; Pred. No. 0.027;
hes 25; Conservative 225; Mismatches 167;
                                                                                                                                                                                                                                                      STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 3000 K St
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                         TELEPHONE: (202)672-5300
TELEFAX: (202)672-5399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1033
 1424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                918
                               581 ACAATGGATTAGAGGCTAAATCATTAGAGAATTATATTGAGAGAAAAAAACTTTCTAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20007
                                                                                                                                                                                                                                                                                      nucleic acid
AGTGTTGGAACTCATTACCAAATATATAA 1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGCCAAGAACACAGGGTAACATTCTCCATAAATAATACTGACCAAATAATGGAGATCCA
                                                                                                TCTTATTTACCTTATCTGCTGAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAGTGTTGGAACTCATTATAAAATATATGA 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGCCAAAAAGACAGGGTAACCTTTACTCAAAATGATACTGACAATACAATGACGGTTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ឧ
                                                                                                                                                                                                                     pTZgpt-F1s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US 07/935,313
                                                                                                                                                                                                                                                                                                                                                                                                                              30472/201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Version
                                                                                                                                                                                                                                                                                                                                                                                                                              DWI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      #
                                                                                                                                  Indels
                                                                                                                                                                Length 7218;
                                                                                                                                  0,
                                                                                                                                  Gaps
                                 640
                                                                  1425
 1365
                                                                                                  580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  977
```

-

```
RESULT 5
PCT-US99-26796-234, Application PC/TUS9926796; Sequence 234, Application PC/TUS9926796; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
밁
                       S
                                                                       밁
                                                                                                    S
                                                                                                                                            밁
                                                                                                                                                                         8
                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Plasmodium falciparum PCT-US99-26796-234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 272
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Pat
SEQ ID NO 234
LENGTH: 3927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: PCT/US99/26796
CURRENT FILING DATE: 1999-11-05
NUMBER OF SEQ'ID NOS: 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: United States Government as Represented by the APPLICANT: Secretary of the Navy TITLE OF INVENTION: Chromosome 2 Sequence of Human Malaria Parasite TITLE OF INVENTION: Plasmodium Falciparum and Proteins of Said TITLE OF INVENTION: Chromosome Useful in Anti-malarial Vaccines and TITLE OF INVENTION: Diagnostic Reagents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 43.9
mes 272; Conservative
                                                                                                                                                                                                                     2691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1304
2871
                                                                     2811
                                                                                                                                                                                                                                                                                           2571 AACACATGATTTTAAAAATGAGTTACTTATTGAAAAATATAATGTTGATAATATATGTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                           2511 TAATATTGGTAAATATCATTTGAATAATAAAAATAATTCATATGATGATGATGCATATATT
                                                                                                                                            144
                              381
                                                                                                        321
                                                                                                                                                                                                                                                                                                                                                                                                       84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24 TGATAGAAGTGGATATCCACCCGTTGAAAAGCAAATAGCAGGAGATATAGTACGTATACT
                                                                                                                                                                                                                                                                                                                                                                                                   AAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGAATATCGAGCTAA 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patentin Ver. 2.1
                                                                                              TGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAAACATTTGGAATGT
                                                                                                                                                                             TAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGATATGGCAAA
                                                                                                                                                                                                                    GAMAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGTATCTAAACTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGAAAAATTGCCGAATAATTTATATAGTGTGAGGCTAAGCCAAAAAGACAGGGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAGGGTAACGCTCCACAGACAGCAGCGAAAAGTATTGGTACAGCCAGTGGCAGTAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATTTTCTAATATGGAAGGGGCTGCAAAACAAAGTATAGTTCATTTATAAAAGAGGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATTATTAGCACT 440
                                                                                                                                                                                                                                                    TGATGACTATTATA---AGAATAAAGAGACTGCTGAGAGAATTTATCAAGAATATATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGAAGCGCCTAAATGGAGAGTGAGTTTTAAAAGAACTTAAAAATAACAAATCTAGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTTCTTTCGACCACCGCAGAGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAA
TGTTGAAAATTTATTGAAAGAACACAAAATAGCTGTTAATGAAAGTGAAGAAATAGCACA
                                                                   TGGTGATAATATAGATGATGATAATATATATGATGGTGATAACATAAATAGTGGTGATAA 2870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    43.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches 344;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 52.6; DB 1; Length 3927; Pred. No. 0.87;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                937
                                                                                                                                                                                                                                                                                           . 2690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1305
                                                                                                                                          2810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                83
```

```
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)...(709368)
; OTHER INFORMATION: n = A,T,C or
US-10-990-328-94720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
US-10-990-328-94720/c
; Sequence 94720, Application US/10990328
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                             밁
                                                                                                                   S
                                                                                                                                                              밁
                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                               δ
                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE: 2004-11-17
NUMBER OF SEQ ID NOS: 558824
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 94720
LENGTH: 709368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 5.2%;
Best Local Similarity 45.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 169;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: CARGILL, Michele
TITLE OF INVENTION: POLYMORPHISMS IN NUCLI
TITLE OF INVENTION: ENCODING HUMAN ENZYMI
TITLE OF INVENTION: USES THEREOF
FILE REFERENCE: CL001495
CURRENT APPLICATION NUMBER: US/10/990,328
674225 ATTAAGAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                         674525 TAACAATAAATATTCCATTTTAATAGTATGTTAAAAAAATCACTCATAAGCCTTTCCTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                674585 TATCTCATCÁCACAAATCAAAAATTAGGAAATGTAGTAGCÁYATTTCACÁTGATCTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2931 AGATATAAAAGAAAAATACGAAAAAGAGATAATGAATTTACTGATTATGTTGAAGAAAA 2990
                                                                                                                                                                                                                                                                                          629 AACTITCTAAACCTTTCTTTCGACCACCGCAGAGATTACCTGATGGCAGAATAGGTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         441 ATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAATGCCGCAAG
                                                                                                                                                                                                                                                                                                                                                                             569 CAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAATTATATTGAGAGAAAAA 628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 509 AATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACTGGGAAGGAGGATTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             449 TCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAATGCCGCAAGATTTTTTTA
                                                                                                                                                                  GATGGAATGCGÁGÁATÁAAĞCTGÁÁTTTATCTATKTTCAYTTÁTGÁTTAAÁÁÁÁÁÁGÁTAÁ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAATTATATTGA 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAGTGATATAAGATTTTATGATAAAGGAAAGGGGGGAAATGGTGAATGAATTAATTGGAGA
                                        TAAAAGAGGT
                                                                                                                 AATCTAGGAATGGATTTTCTAATATGGAAGGGGCTGCAAAACAAAAGTATAGTTCATTTA
                                                                                                                                                                                                                                                    TCYTTATTGGCTGCCTCTTAACATAATTTTTĞTTATTCTTCCTCCTCAĞTATTĞĞTTAĞT
                                                                                                                                                                                                                                                                                                                                       TGCAGTATTTTATCTGTTTATTTCACTCTAAAGTTACAGAAACGTAACSTATAATCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGTGTAAAAAATGATAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGAAAAAACTTTCTAAA 639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATATTCAGAAAATATATGGATAATAATATTGAAGACAATGAACTGGTTATATGGAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACTGGGAAGGAG
                                                                                  ATTCTAAGTAGGTATTTTAAAAGATAGTTTGACATATACACTCCCAGTGTTGGACTTGAA
                                                                                                                                                                                                        TGGCTGGACCAACAGAAGCGCCTAAATGGAGAGTGAGTTTTAAAGAACTTAAAAATAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Michele
POLYMORPHISMS IN NUCLEIC ACID MOLECULES
ENCODING HUMAN ENZYME PROTEINS, METHODS OF
674216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   u;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 52; DB 67; Length 709368; Pred. No. 4.9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches 198;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DETECTION
                                                                                                                                                                                                                                                                                               889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3050
                                                                                                                          808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  500
                                                                                                                                                                  674286
                                                                                                                                                                                                                                                                                                                                       674406
                                                                                                                                                                                                                                                                                                                                                                                                                         674466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                674526
                                                                                                                                                                                                                                                    674346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
RESULT 8

US-10-235-192A-27

US-10-235-192A-27

Sequence 27, Application US/10235192A

GEBERAL INFORMATION:

APPLICANT: McCarthy, Jeanette

TITLE OF INVENTION: Methods and Compositions for Identifying

TITLE OF INVENTION: And Disorders Abnormal Lipid Levels and

TITLE OF INVENTION: and Disorders Associated Therewith

FILE REFERENCE: MMI-011

CURRENT FILING DATE: 2002-09-04

NUMBER OF SEQ ID NOS: 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 7
US-10-473-126-386/c
                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: chemically treated US-10-473-126-386
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 386, Application US/10473126
GENERAL INFORMATION:
APPLICANT: Epigenomics AG
TITLE OF INVENTION: Methods and nucleic acids for the
TITLE OF INVENTION: proliferative disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 386
LENGTH: 8056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 226;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE:
CURRENT APPLICATION NUMBER: US/10/473,126
CURRENT FILING DATE: 2003-09-26
NUMBER OF SEQ ID NOS: 1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Artificial
                                                                                                                                                                                                                                                                                                                                                                                1008
                                                                                                                                                                                                                                                                                                                                                                                                                                           1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            948
                                                                                                                                                                                                                                                                                                                                                  561
                                                                                                                                                                                                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                         621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAAGAAAATATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGTATCTAAACT
                                                                                                                                                                                                                                                                                                                                                 GATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAATTATATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGAATATATGTC
                                                                                                                                                                                                                                                                              GAGAAAAAAACTTTCTAAA 639
                                                                                                                                                                                                                                                                                                                     TATTTTAAAAAATTTATTACAAAAACAACAAAAATAATTAAAATATAAATTTAAATA 889
                                                                                                                                                                                                                                                                                                                                                                                                     ATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACTGGGAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                         ATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAATGCCGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATTATTAGCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACATTTGGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGATATGGCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTACAAAATTTTTATACA
                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 51; DB 55; 1
Pred. No. 2.4;
0; Mismatches 270;
                                                                                                                                                                                                                                                           870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                analysis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens)
                                                                                                                       and
                                                                                                                       the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hematopoietic
                                                                                                                       Diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1306
                                                                                                                                                                                                                                                                                                                                                                                949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cell
```

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; FEATURE:
NAME/KEY: misc feature
LOCATION: 145329-145428, 187896-187995,
OTHER INFORMATION: N = any nucleotide
US-10-235-192A-27
                                                                                                                                                     RESULT 9
PCT-US99-26796-311
Sequence 311, Application PC/TUS9926796
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                           닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
                                       APPLICANT: United States C. APPLICANT: Secretary of the Navy
TITLE OF INVENTION: Chromosome 2 Sequence of Human Malaria Paras:
TITLE OF INVENTION: Plasmodium Falciparum and Proteins of Said
TITLE OF INVENTION: Chromosome Useful in Anti-malarial Vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: FASTSEQ
SEQ ID NO 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
FILE REFERENCE:
CURRENT APPLICATION NUMBER: PCT/US99/26796
CURRENT FILING DATE: 1999-11-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   103629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              / Match 5.0%;
Local Similarity 42.6%;
hes 263; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   103689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 103869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 103809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   103749
                                                                                                                                                                                                                                                                                                                           104169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             103989
                                                                                                                                                                                                                                                                                                                                                                                                                            492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12 ATTAACACCTGATGATAGAAGTGGATATCCACCCGTTGAAAAAGCAAATAGCAGGAGATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    188971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGA 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGAATATCTATATGAATATCTATATATGAATATCTATGAATATCTATATGAATATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCTATATATATATATATATATATATATCTATACATGAATATCTATATGAATATCTATAT
                                                                                                                                                                                                                                                                                                                         ATTATATATGAATATATATGAATATATATATGAATATATATGAATATATATATATATGAATT 104228
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATATGAATATATATATGAATATATGAATATATATATGAATATATGAATATATATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĀTĀTGĀĀTĀTĀCATGĀĀTĀTATGĀĀTĀTATGĀĀTĀTĢĀĀTĀTCTATĀTGĀĀTĀTĀT
                                                                                                                                                                                                                                                         ATATATGAATATATATA 104245
                                                                                                                                                                                                                                                                                          TTATATTGAGAGAAAAA
                                                                                                                                                                                                                                                                                                                                                         GGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                           TGAATTATATATGAATATATATGAATATATATGAATATATATATGAATATATATATATGA
                                                                                                                                                                                                                                                                                                                                                                                                                          TGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGT 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for Windows
                                                                                                                                                                                                                                                                                          628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 50.6; DB Pred. No. 6.9; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      195894-195993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    354;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    50;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 188971;
                                                                                                         Parasite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                        and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                            611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    131
                                                                                                                                                                                                                                                                                                                                                                                                                              551
                                                                                                                                                                                                                                                                                                                                                                                                                                                               104108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   103868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   103808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     103748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     103688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 103988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
APPLICANT: GOFF, STEPHEN
APPLICANT: BONAN, CAROLINE
APPLICANT: BONAN, CAROLINE
APPLICANT: WANG, MICHELLE
APPLICANT: WANG, RONG-LIN
TITLE OF INVENTION: CEREAL TRINUCLEOTIDE SIMPLE SEQUENCE
TITLE OF INVENTION: REPEAT MARKERS AND THEIR USES
FILE REFERENCE: NADII.058C1
CURRENT APPLICATION NUMBER: US/10/266,090
CURRENT FILING DATE: 2002-10-03
PRIOR APPLICATION NUMBER: US 10/260,703
PRIOR APPLICATION NUMBER: US 60/326,117
                                                                                                                                                                                                                   RESULT 10
US-10-266-090-23096
; Sequence 23096, Application US/10266090
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; NUMBER OF SEQ.ID NOS:
; SOFTWARE: Patentin Ver
; SEQ ID NO 311
; LENGTH: 3738
; TYPE: DNA
; ORGANIAM: Plasmodium f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCT-US99-26796-311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 271; Conserv
                                                                                                                                                                                                                                                                                                                                                                                               3076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                529
                                                                                                                                                                                                                                                                                                                                                            769
                                                                                                                                                                                                                                                                                                                                                                                                                                  709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATAATAATAATGGTGATAATATTTATAATGATGATCTTAAGAAATATTATTTGAATACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATAATGACAATATTGATAATAATAATAATAATAATAATAATAACAATATTGATAATAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTATTCAGATGACGATAAATTATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTĞATTCA-ATAATTAAGACAATGGAAAATAAACCGAACTTAACAAATAAAAATTATATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCTGAGAGAATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGTAAGTGGTATTCATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGA
                                                                                                                                                                                                                                                                                                                           AAAA
                                                                                                                                                                                                                                                                                                                                                              AATA
                                                                                                                                                                                                                                                                                                                                                                                               AAATGTTTTTTTTTÄATTTTCCACAAATAAAAGAAATAATATTTGTAAATGAATAGAA 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACAAAGGGAATATGTTAAATGATGTTACAAAATTATATATGTCTAATGCATATGGTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGACCACCGCAGAGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTATATTAATAAAGACTTATATGTAAAACATTTTGTAGATATTATGAACAAAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGAGGAAAATCAACAATCAAATGCCGCAAGATTTTTTAAATTAAT-TGATTTCTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGGTCAATATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGTGATCAAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTACTAATAGTAATGATAGTAATGATAGTAGTGATAATAACAATAATAATAATAATAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                CCTAAATGGAGAGTGAGTTTTAAAGAACTTAAAAATAACAAATCTAGGAATGGATTTTCT 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCTTATCTGCTGTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATAATAATAATAATTATAATAATAATAATTCTGTCATATTTTCAACAAATGAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      falciparum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches 331;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 50.4; DI
Pred. No. 2.6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2716
```

```
; PRIOR FILING DATE: 2001-09-26; NUMBER OF SEQ ID NOS: 51812; SOFTWARE: FastSEQ for Windows Ve; SEQ ID NO 23096; LENGTH: 1145
; TYPE: DNA; TYPE: DNA; ORGANISM: ZEA MAYS; FEATURE: NAME/KEY: misc_feature; LOCATION: (1)...(1145); OTHER INFORMATION: n = A,T,C or US-10-266-090-23096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                 S
                                                     밁
                                                                               Ś
                                                                                                              밁
                                                                                                                                        S
                                                                                                                                                                      밁
                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                               뭉
                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                       멂
                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                      片
                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                       557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           236 AGAGAATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    tch 5.0%; al Similarity 26.1%; 202; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TACTGACAATACAATGACGGTTCATAGTGTTGGAACTCATTATAAAAATATAT 1006
                                                        NINNTAATTATATININNTNINNNINNNINNNINNNINAATAAAATAAAATTAANTTAT
                                                                                                                                         TCCACAGACAGCAGCGAAAAGTATTGGTACAGCCAGTGGCAGTAACCTGGAAAAATTGCC
                                                                                                                                                                                                                                                           ATGGAGAGTGAGTTTTAAAGAACTTAAAAATAACAAATCTAGGAATGGATTTTCTAATAT 773
                                                                                                                                                                                                                                                                                                                                                                          ATCTGCTGTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAAACTTTTTACAATGGATTAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCAGATGACGATAAATTATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TANTINTATTAAATNATTTAAAATTINNINAATTINNITTTIAAATANTTTINITTTAININTAT 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATATCCTCAAAACATTTGGAATGTTCC--TGAGCTTGAAAATAAACCATTGAGTGCTTA 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ANNAATATNNATAATTAAAAAAATTTTÄAATATTÄTÄÄTÄTTTTTTTANTÄANTTN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCAAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTC
NINNNATTININATANININNNATATAATINTATATTTININANININNATNINININNNINATATA 616
                                                                                                                                                                                                                               ACCGCAGAGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAA 713
                                                                                                                                                                                                                                                                                                                                                                                                        GAATAATTTATATAGTGTGAGGCTAAGCCAAAAAGACAGGGTAACCTTTACTCAAAATGA
                                                                                                                                                                                                  GGAAGGGGCTGCAAAACAAAAGTATAGTTCATTTATAAAAGAGGTACAAAAGGGTAACGC
                                                                                                                                                                                                                                                                                                                                             Score 50.2; DB Pred. No. 2.1; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 51;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         569;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
                                                                                                                                                                                                                                                                                         496
                                                                                                                                                                                                                                                                                                                                                436
                                                                                                                                                                                                                                                                                                                                                                           653
                                                                                                                                                                                                                                                                                                                                                                                                        376
                                                                                                                                                                                                                                                                                                                                                                                                                                    593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 76
```

RESULT 11 US-10-240-453-95 ; Sequence 95, Ap

Application US/10240453

```
; NAME/KEY: misc feature
; LOCATION: (1)...(318007
; OTHER INFORMATION: n =
US-09-948-124-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 12
US-09-948-124-61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-240-453-95
                                                                                                                                                                                                                                        Sequence 61, Application US/09948124
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig
TITLE OF INVENTION: COLLECTION OF SINGLE NUCLEOTIDE POLYMORPHISM (SNPs) LOCATED ON
TITLE OF INVENTION: Y, METHODS OF DETECTION, AND USES THEREOF
FILE REFERENCE: CL001301
CURRENT APPLICATION NUMBER: US/09/948,124
CURRENT FILING DATE: 2002-12-23
                                                                                                                                                                                SEQ ID NO 61
LENGTH: 318007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 95
LENGTH: 11394
  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 2001-04-05
PRIOR APPLICATION NUMBER: DE 10019058.8
PRIOR APPLICATE 2000-04-06
PRIOR TITNIG DATE: 2000-04-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: OLEK, Alexander
APPLICANT: PIEPENBROCK, Christian
APPLICANT: BERLIN, Kurt
TITLE OF INVENTION: Diagnosis of Diseases Associated with DNA
TITLE OF INVENTION: Transcription
TITLE OF INVENTION: by Means of Assessing the Methylation Status
TITLE OF INVENTION: With DNA TRANSCription
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: DE 10019173.8 PRIOR FILING DATE: 2000-04-07 PRIOR APPLICATION NUMBER: DE 10032529.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 5013.1009
CURRENT APPLICATION NUMBER: US/10/240,453
CURRENT FILING DATE: 2002-10-02
PRIOR APPLICATION NUMBER: PCT/EP01/03973
                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: DE 10043826.1 PRIOR FILING DATE: 2000-09-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2000-06-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS:
                                                                                                                       ORGANISM: HUMAN FEATURE:
                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: chemically treated genomic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             244 TATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATT 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          184 CATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          124 GGAATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATAT 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATATATATAATATAAATGTGTATATATGTATAAATATTTATAAATATGTGTATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGAATGGATTAGAGTGGTAAGATATTAGAATGAATTTATGTTTAGATATATATATATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGGGTTAGTATTTATATATTTATTTTGTTTGTTAGTTGAGAAGGTTTAGAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                               (318007)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.9%;
                                                        A,T,
  4.9%;
                                                            'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ٥,
                                                            ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 49.8; DB 50;
Pred. No. 4.8;
0; Mismatches 117;
  Score
  49
.
8
  멂
41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
Length 318007;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 11394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ,
,

양
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genes Associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    377
                                                                                                                                                                                                                                                                                                                          Ω
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                           밁
                                                                                      Ś
                                                                                                                       밁
                                                                                                                                                Ś
                                                                                                                                                                                   밁
                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
US-09-947-911-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                    US-09-947-911-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2, Application US/09947911
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig
APPLICANT: VENTER, J. Craig
TITLE OF INVENTION: COLLECTION OF SINGLE NUCLEOTIDE POLYMORPHISM (SNP8) LOCATED ON
TITLE OF INVENTION: X, METHODS OF DETECTION, AND USES THEREOF
FILE REFERENCE: CL001300
CURRENT APPLICATION NUMBER: US/09/947,911
CURRENT FILING DATE: 2001-09-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 2
LENGTH: 600322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 46.6 Matches 159; Conservative
                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                        Matches 159;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF
                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(600322)
OTHER INFORMATION: n = A,T,C or
                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             133441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  133501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              348
                                                                                                                                                                                                               168 GGCTGTAAGTGGTATTCATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGA
                                                                                                                                                                                                                                                                       108 TCATACAGCATCATATGGAATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID
                                                                                                                                                                                   TAATATATAATTATATAAATATATAAATATATAATTATGTATAAATTATATAACATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TÄTTTATAÄAGÄÄÄTÄTATÄTTTÄTÄAATAÄÄTATCTATATGTÄTGÄÄGÄÄÄCATATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCTGTAAGTGGTATTCATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCATACAGCATCATATGGAATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTT
                                                                                         AAATGGTGATCAAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTT
                                                                                                                       GACTGCTGAGAGAATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTATAAATAAATATATATTATATATAAATAAATATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAATGGTGATCAAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGAAGGTCAATATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAG
                                                           TGCTTATTCAGATGACGATAAATTATTAGCACTATATTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAAGGTCAATATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTGCTGAGAGAATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGA
                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NOS: 368
                                                                                                                                                                                                                                                                                                                     46.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    46.6%;
                                                                                                                                                                                                                                                                                                        <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 12;
0; Mismatches
                                                                                                                                                                                                                                                                                                                     Score 49.8;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                          14;
                                                                                                                                                                                                                                                                                                                                     DB 41;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      182;
                                                                                                                                                                                                                                                                                                        182;
                                                                                                                                                                                                                                                                                                                                     Length 600322;
                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        133601
                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>,,</u>
                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                           347
                                                                                                                                                                                                                                                                          167
                                                                                                                                                     287
                                                                                                                        500048
                                                                                                                                                                                                                  227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             133500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         167
                                                                                                                                                                                    499988
                                                                                                                                                                                                                                             499928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 133380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            133320
                                                             500108
                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   윤
```

S

408

TGCTTATTCAGATGACGATAAATTATTAGCACTATATTTTT

448 .

```
RESULT 14
PCT-US99-26796-238
                            Ś
                                                                                                   δ
                                                                                                                                       밁
                                                                                                                                                                         8
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                    吊
                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            묽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: DNA ; ORGANISM: Plasmodium falciparum PCT-US99-26796-238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    닭
밁
                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 238, Application PC/TUS9926796
GENERAL INFORMATION:
APPLICANT: United States Government as Represented APPLICANT: Secretary of the Navy
TITLE OF INVENTION: Chromosome 2 Sequence of Human TITLE OF INVENTION: Plasmodium Falciparum and ProteTITLE OF INVENTION: Chromosome Useful in Anti-malar TITLE OF INVENTION: Diagnostic Reagents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQ ID NO 238
LENGTH: 5940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 284;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
SOFTWARE: PatentIn V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: PCT/US99/26796
CURRENT FILING DATE: 1999-11-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        175 AGTGGTATTCATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCT
825
                                                                                                                                                                                                                645
                                                                                                                                                                                                                                                    595
                                                                                                                                                                                                                                                                                      585
                                                                                                                                                                                                                                                                                                                          535
                                                                                                                                                                                                                                                                                                                                                              529
                                                                                                                                                                                                                                                                                                                                                                                                 475
                                                                                                                                                                                                                                                                                                                                                                                                                                   469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            235
                                 775
                                                                     765
                                                                                                                                           705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                   GAATTAGAAAAAGAATTAAAAGAAGTAAAGGATAAGAATATTGATAATGATTATGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACATTAAAGTCCATTAGTTCGTTGTCGAATAAAATTGTGAATTACGAAAGTAAAATTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAATATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTAT 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATCAAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAGAATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGT 294
                               GAAGGGGCTGCAAAAACAAAAGTATAGTTCATTTATAAAAGAGGTACAAAAGGGTAA 830
                                                                                                 TGGAGAGTGAGTTTTAAAGAACTTAAAAATAACAAATCTAGGAATGGATTTTCTAATATG
                                                                                                                                                                                                                TGAAAAAGAATATAATAAAAAAAGGAAGAAACATTTCATAATATAGAAAAAGAGTA
                                                                                                                                                                                                                                                AAAAGAAAATCTTTTACAAGAAAAGAATTAGATATTAATAAAAGAGAAAAGAAAATTAA
                                                                                                                                                                                                                                                                                                                        TCTGCTGTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAG 594
                                                                                                                                                                                                                                                                                                                                                              AATAAATTAAAAGAAAAAG----AAGATTTTGTTAAACAAAAAATTGATATGCTAAATGA
                                                                                                                                                                                                                                                                                                                                                                                               TCAGATGACGATAAATTATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAG 474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATGAAATATCAAAAAATATTATACATAAAGACAATGAGCTAGAAAACCAGCTTAAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATAATAATGATAATAATGATAACAATAATGATAATAATAATAATAATAATAATGAT
                                                                                                                                           TTTAGAAAAAATAAAGAAAGAAACGATTTCTATAGAAATTATAGATATTAAAAAACA
                                                                                                                                                                             CCGCAGAGATTACCTGATGGCAGAATAGGTTATTTGGCTGGACCAACAGAAGCGCCTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Secretary of the Navy
VENTION: Chromosome 2 Sequence of Human Malaria Parasite
VENTION: Plasmodium Falciparum and Proteins of Said
VENTION: Chromosome Useful in Anti-malarial Vaccines and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTATAAATAATATATATTTATATATAAATAATATTT
                                                                   TCTAGAAAAACTAAAAATAGAAATAAAAGAAAAAAAAAGAAGATTTAGAAAATTTAAATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.9%;
ilarity 43.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 49.2;
Pred. No. 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches 368;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 5940;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    γď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    500209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4;
                                                                                                                                                                             714
                                                                                                                                                                                                                704
                                                                                                                                                                                                                                                  654
                                                                                                                                                                                                                                                                                      644
                                                                                                                                                                                                                                                                                                                                                              584
                                                                                                                                                                                                                                                                                                                                                                                               534
                                                                                                                                                                                                                                                                                                                                                                                                                                   528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               288
                                                                     824
                                                                                                                                         764
```

Search completed: March 1, Job time : 4616 secs

2005, 08:11:55

```
S
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 15
US-09-865-419A-12520
; Sequence 12520, Appl
; GENERAL INFORMATION:
                            Ś
                                                                  밁
                                                                                                S
                                                                                                                                  밁
                                                                                                                                                                 á
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-865-419A-12520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Conner, Timothy W.
APPLICANT: Wu, Kunsheng
APPLICANT: Wu, Kunsheng
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
TITLE OF INVENTION: Plants
FILE REFERENCE: 38-21(51935)B
CURRENT APPLICATION NUMBER: US/09/865,419A
CURRENT APPLICATION NUMBER: US/09/865,419A
CURRENT FILING DATE: 2001-05-29
PRIOR APPLICATION NUMBER: US 60/208,063
PRIOR FILING DATE: 2000-05-31
NUMBER OF SEQ ID NOS: 54020
SEQ ID NO 12520
LENGTH: 572
TWOTH. 572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 169;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: unsure
LOCATION: (1)..(572)
COTHER INFORMATION: unsure at all n locations
OTHER INFORMATION: Clone ID: LIB3236-144-P1-N1-H3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Zea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Match 4.9%;
Local Similarity 44.9%;
554 TAAAAAAAAANTTTATT
                                                                                                870 TGGCAGTAACCTGGAAAAATTGCCCGAATAATTTATATAGTGTGAGGCTAAGCCAAAAAGA
                                                                                                                                   690 GGCTGGACCAACAGAAGCGCCTAAATGGAGAGTGAGTTTTAAAGAACTTAAAAATAACAA
                                                                                                                                                                                                                                                                                                                                          630 ACTTTCTAAACCTTTCTTTCGACCACCACCAGAGATTACCTGATGGCAGAATAGGTTATTT
                                                                                                                                                                                                                                                                                                                                                                                                             570 AAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAATTATATTGAGAGAAAAA
                                 CAGGGTAACCTTTACT 945
                                                                 ANAAGAGGTACAAAAGGGTAACGCTCCACAGACAGCAGCGAAAAGTATTGGTACAGCCAG
                                                                                                                                                                                                      ATCTAGGAATGGATTTTCTAATATGGAAGGGGCTGCAAAACAAAAGTATAGTTCATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09865419A
 569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 49; DB 3
Pred. No. 3.2;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 37; Length 572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                207;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                    929
                                                                                                                                     493
                                                                                                                                                                                                        433
                                                                                                                                                                                                                                                                           373
                                                                                                                                                                                                                                                                                                                                            313
                                                                                                                                                                                                                                                                                                                                                                             689
                                                                                                                                                                                                                                                                                                                                                                                                               253
                                                                                                                                                                                                                                                                                                                                                                                                                                              629
                                                                    55
                                                                                                                                                                       869
                                                                                                                                                                                                                                                                                                            749
```

•		
	.,	

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence:
      Pred. No. is the number of results predicted by chance to l score greater than or equal to the score of the result being and is derived by analysis of the total score distribution
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score
                                                                                     45.2
40.6
40.4
40.4
40.2
    38.8
38.6
38.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pending_Patents_NA_New:*

1: /cgn2_6/ptodata/1/pna/US06_NEW_COMB.seq:*

2: /cgn2_6/ptodata/1/pna/US07_NEW_COMB.seq:*

3: /cgn2_6/ptodata/1/pna/US07_NEW_COMB.seq:*

4: /cgn2_6/ptodata/1/pna/US09_NEW_COMB.seq:*

5: /cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*

6: /cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*

7: /cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*

8: /cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*

9: /cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*

9: /cgn2_6/ptodata/1/pna/US10_NEW_COMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             March 1, 2005, 05:41:20; Search time 271 Seconds (without alignments) 2484.740 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5184529 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IDENTITY_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-617-962-2
    5.1 1134
4.5 3089
4.3 3089
4.0 12610
4.0 12610
4.0 12610
4.0 1691140
3.9 37627
3.9 2460
3.9 19634
3.9 19634
3.9 19634
3.9 2260
3.9 5286
3.9 5286
3.9 5286
3.9 5286
3.9 5286
3.9 5286
3.9 5286
3.9 5286
3.9 5286
3.9 5286
3.9 5286
3.9 5286
3.9 5286
3.9 5286
3.8 5286
3.8 19638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atggttatacaattaacacc.....ctcattataaaaatatatga 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen
                1 6 US-10-932-182A-166160
2 6 US-10-954-778-160
3 6 US-10-954-778-160
3 7 US-10-954-778-160
3 7 US-10-517-441-307
3 7 US-10-517-441-31
0 7 US-10-517-441-31
1 0 8 US-10-932-182A-166164
4 0 9 US-10-932-182A-76518
4 7 US-10-932-182A-76518
4 7 US-10-517-441-68
8 8 US-11-044-879-3
3 8 US-11-044-879-3
3 9 US-10-932-182A-6042
6 7 US-10-932-182A-6042
6 7 US-10-517-441-24
6 7 US-10-517-441-24
6 7 US-10-517-441-29
6 0 US-10-517-441-29
7 US-10-517-441-58
7 US-10-517-441-58
7 US-10-517-441-58
7 US-10-517-441-58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 334010122 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ltd.
Sequence 166160,
Sequence 4, Appli
Sequence 160, App
Sequence 170, App
Sequence 307, App
Sequence 715, App
Sequence 715, App
Sequence 166164,
Sequence 1, Appli
Sequence 43, Appli
Sequence 688, Appli
Sequence 688, Appli
Sequence 688, Appli
Sequence 689, Appli
Sequence 12549, A
Sequence 5042, Appli
Sequence 5042, Appli
Sequence 5042, Appli
Sequence 567, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         to have a
being printed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-932-182A-166160

US-10-932-182A-166160, Application US/10932182A

; Sequence 166160, Application US/10932182A

; GENERAL INFORMATION:

; APPLICANT: NAKAO, YOSHIHIRO

; APPLICANT: NAKAO, YOSHIHISA

APPLICANT: KODAWA, YUKIKO

; APPLICANT: FULIMURA, TOSHIHIKO

; APPLICANT: ASHIKARI, TOSHIHIKO

; TITLE OF INVENTION WITHOUS FOR ANALYZING GENES OF INDUSTRIAL YEASTS

; FILE REFERENCE: 030685-043

; CURRENT APPLICATION NUMBER: US/10/932,182A

; CURRENT FILING DATE: 2004-09-02

; NUMBER OF SEQ ID NOS: 197023

; SOFTWARE: Patentin version 3.3

; SOFTWARE: Patentin version 3.3

; SEQ ID NO 166160
                                                                                                                                                                          Ş
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                  유 성
                                                                                                                                        당
                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Saccharomyces pastorianus
US-10-932-182A-166160
      RESULT 2
```

		0 0			ď	3 0		ი	ი				•			
44 5	4 2 3	410	39	38	7 (ט ע ט ע	ω 4.1	33	32	31	30	29	28	27	26	25
37 37	37.2 37	37.2	37.4	37.4	37.6	37.6	37.8	37.8	37.8	38	38	38	38.2	38.2	38.2	38.4
3.7 3.7	3.7	3.7	3.7	3.7	3 . 7	ມ ເ. 7 -			3.8				3. 8			3.8
10412 10412	6327 4469	5286	8391	2743	12610	2226	92721	10865	10865	363361	109669	76829	100596	7110	7110	10865
9	0 0	7 '	1 0	ω.	7 -	۷ -		7	7	æ	œ	_	۲	7	7	7
US-10-287-436A-56 US-10-287-436A-317	US-10-932-182A-75787 US-10-472-963-1492	US-10-517-441-567	US-10-932-182A-166179	US-11-051-267-1	US-10-517-441-442	IIS-10-517-441-294	US-10-014-101B-37	US-10-517-441-738	US-10-517-441-464	US-11-021-837-53	US-11-021-837-41	PCT-US04-42189-27	PCT-US04-42189-92	US-10-517-441-596	US-10-517-441-322	US-10-517-441-737
Sequence 56, Appl Sequence 317, App	Sequence 75787, A Sequence 1492, Ap	Sequence 567, App	16	۲,	4 4	Sequence 568. App	ω 7	Sequence 738, App	Sequence 464, App	Sequence 53, Appl	Sequence 41, Appl	Sequence 27, Appl	Sequence 92, Appl	Sequence 596, App	Sequence 322, App	Sequence 737, App

ALIGNMENTS

```
Query Match 5.1%; Score 51; DB 6; Best Local Similarity 48.2%; Pred. No. 0.008; Matches 144; Conservative 0; Mismatches 1
                                                                                                                                                                                                                                                                                         670 GATATAGATAAATAATAATGGAATTATAACAAATTATCAACGTATATTAAATAATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                     148 ATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGTATCTAAACTTCCTGAT
850
                                                                                                                                           328 TATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACATTTGGAATGTTCCTGAG
                                                                                                                                                                                            268 TCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTTCTAAAGATATGGCAAATGGTTTT
                                                                                                                                                                                                                                                                                                                                     208 GACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGAATATATGTCTAATCTT
                                                                                                                                                                                                                                                                                                                                                                                            610 ATTAAATTATCATATATTATATAAATAGTGATATTTTAGTAAATATATTAGTTTAAAT
TTATATAATAATATAATATTGATAATATTCCTATAGATATTTTAATATTTAAATATTT
                                           CTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATTATTAGCACTATATTT 446
                                                                                             DB 6; Length 1134;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
908
                                                                                                                                                                                            789
                                                                                                                                                                                                                                             327
                                                                                                                                                                                                                                                                                            729
                                                                                                                                                                                                                                                                                                                                             267
                                                                                                                                                                                                                                                                                                                                                                                              669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

იიი

a a

```
RESULT 3
US-10-954-778-160/c
US-10-954-778-160/c
Sequence 160, Application US/10954778
GENERAL INFORMATION: LAURENCE J.
APPLICANT: ZWIEBEL, LAURENCE J.
TITLE OF INVENTION: ODORANT RECEPTORS OF
FILE REFERENCE: N1125
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-691-672A-4/c
CURRENT APPLICATION NUMBER: US/10/954,778
CURRENT FILING DATE: 2004-09-30
PRIOR APPLICATION NUMBER: 10/056,405
PRIOR FILING DATE: 2002-01-24
PRIOR APPLICATION NUMBER: 60/264,649
PRIOR APPLICATION NUMBER: 60/264,649
PRIOR FILING DATE: 2001-01-26
NUMBER OF SEQ ID NOS: 248
SOFTWARE: Patentin Ver. 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-691-672A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4, Application US/10691672A
GENERAL INFORMATION:
APPLICANT: DRUILHE, PIERRE
TITLE OF INVENTION: GLURP-MSP3 FUSION PROTEIN, IMMUNOGENIC COMPOSITIONS
TITLE OF INVENTION: MALARIAL VACCINES CONTAINING IT
FILE REFERENCE: 02556.0085
CURRENT APPLICATION NUMBER: US/10/691,672A
CURRENT FILING DATE: 2003-10-24
NUMBER OF SEQ ID NOS: 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 4
LENGTH: 1941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 195; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn Ver. 3.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: Description OTHER INFORMATION: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                               345
                                                                                                                                                                                                                                                                                                                                                                                                      525
                                                                                                                                                                                                                                                                                                                                                                                                                                           405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              105 GGGTCATACAGCATCATATGGAATTGAATATCGAGCTAAGAAAATAATTAGCTTACGC 164
                                                                                                                                                                                                                                                                                                                                                               ATTTTC 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGTGCTTATTCAGATGACGATAAATTATTAGCACTATATTTTTTTCTCTGTACAGGAAAT 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTTCATGAAATACGTTTTTTTTCTTCATTATGATTGTCTACCTTTTTATGCTTTTGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGACTGCTGAGAGATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                тттеестеталетестаттсяталетатстальсттестеледестаттаталелатал
                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCAAGTAATTCTAAATCTGATAATGATTCAAAATGATTTTGTACTTTATTTGATTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGATCATTTGGTATGGATAAATTTTCATGAACAAGTGGTTCATTTTCTATTTTTTCATCT
                                                                                                                                                                                                                                                                                                                                                                                                      ATTTAC 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGTGTAGGAAAGGGTTCTAAAGGTTCATCATTTAAATCTTGTTAAGTCTTTATGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTTTGAAGGTCAATATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -GGÄÄATGGTTCTGÄÄTCTTCTTCÄTTTÄTTAAÄTTTTTTTCTTTATÄATCTTTÄTGTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAAATGGTGATCAAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGA 344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTTÄAATGTTCATCGAÄTGATTTÄAGTTTCAÄÄCTTCCTTGATTACCATTTGCAGAACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     45.8%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches 230;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 46; DB 6
Pred. No. 0.12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of Artificial Sequence:
                                                                                                                                                                                                    CHEMICAL AGENTS WHICH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 6;
                                                                                                                                                                                 SENSORY NEURONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.
                                                                                                                                                                                                    STIMULATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       705
```

```
밁
                                                                                    S
                                                                                                                 밁
                                                                                                                                        Ş
                                                                                                                                                                         밁
                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                            닭
                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                      皮
                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: DNA; ORGANISM: Anopheles gambiae US-10-954-778-160
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 4.5%;
Best Local Similarity 44.3%;
Matches 185; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 160
LENGTH: 3089
                                                          1917
                                                                                                                    1977
                                                                                                                                               288
                                                          AAATGGTGATCAAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTT 347
                                                                                                                                                                                                        GACTGCTGAGAGAATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGA
                                                                                                                                                                                                                                                                 GGCTGTAAGTGGTATTCATAATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGA
                                                                                                                                                                                                                                                                                                                         TCATACAGCATCATATGGAATTGAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTT 167
                                                                                                                                                                                                                                                                                                                                                        TGAAAAGCAAATAGCAGGAGATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGG
TATTTTGGTTCCTGTAACTAAATTGGTTACTAAAAATGGTTTATCTTTCTCTTAAAAT 1800
                                                                                    TGAAGGTCAATATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAG 407
                                                                                                                  TGCTTATTCAGATGACGATAAATTATTAGCACTATATTTTTTCTCTGTACAGGAAATT 465
                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                             Score 45.2; DI
Pred. No. 0.2;
                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches 233;
                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 3089;
                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                            1978
                                                                                                                                                                                                        287
                                                                                                                                                                                                                                                                  . 227
                                                                                                                                                                                                                                                                                                                                                                                     107
                                                                                                                                                                                                                                     2038
                                                                                                                                                                                                                                                                                              2098
                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
SEQUENCE 160, Application US/10954778

GENERAL INFORMATION:

APPLICANT: ZWIEBEL, LAURENCE J.

TITLE OF INVENTION: WETHOD OF IDENTIFYING CHEMICAL AGENTS WHITITLE OF INVENTION: ODORANT RECEPTORS OF SENSORY NEURONS

FILE REFERENCE: N1125

CURRENT APPLICATION NUMBER: US/10/954,778

CURRENT FILING DATE: 2004-09-30

PRIOR APPLICATION NUMBER: 10/056,405

PRIOR APPLICATION NUMBER: 00/264,649

PRIOR APPLICATION NUMBER: 00/264,649

PRIOR FILING DATE: 2001-01-26

VOUNDER: 05 SEQ ID NOS: 248
밁
                                   S
                                                                                                                                                           ; ORGANISM: Anopheles US-10-954-778-160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-954-778-160
                                                                                                                                                                                                 SOFTWARE: PatentIn Ver. 3.3
SEQ ID NO 160
LENGTH: 3089
TYPE: DNA
                                                                           Matches 191;
                                                                                                Query Match
Best Local Similarity
                                     ATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATTGAATATCGA 138
                                                                             Conservative
                                                                                                4.3%;
                                                                                                                                                                                gambiae
                                                                           0;
                                                                                              Score 43.4; DB Pred. No. 0.52;
                                                                             Mismatches
                                                                                                                   DB 6;
                                                                           246;
                                                                                                                   Length 3089;
                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WHICH STIMULATE
                                                                           0;
```

Ş

139 GCTAAGAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGTATCTAAA 198

```
SEQUENCE INFORMATION:

APPLICANT: FORKENS, John
APPLICANT: HARBECK, Nadia
APPLICANT: KOENIG, Thomas
APPLICANT: MAIER, Sabine
APPLICANT: MAIER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 5
US-10-517-441-307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
S
                                                                     Ś
                                                                                                                                                                                                                                                                                                                      CURRENT FILING DATE: 2004-12-11
PRIOR APPLICATION NUMBER: PCT/EP2003/010881
PRIOR FILING DATE: 2003-10-01
PRIOR APPLICATION NUMBER: DE 10317955.0
PRIOR FILING DATE: 2003-04-17
PRIOR FILING DATE: 2003-04-17
PRIOR APPLICATION NUMBER: DE 10300096.8
PRIOR FILING DATE: 2003-01-07
PRIOR APPLICATION NUMBER: DE 10245779.4
PRIOR FILING DATE: 2002-10-01
                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 2147
SEQ ID NO 307
                                                                                                       Query Match 4.0%;
Best Local Similarity 43.7%;
Matches 178; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                               OTHER INFORMATION: chemically treated genomic DNA -10-517-441-307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: SCHMITT, Armin
APPLICANT: SCHMITT, Manfred
APPLICANT: LOOK, Maxime p.
APPLICANT: HOEFLER, Heinz
TITLE OF INVENTION: Method and nucleic acids for the improved treatment of breast cel
TITLE OF INVENTION: proliferative disorders
FILE REFERENCE: 47675-93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/517,441
CURRENT FILING DATE: 2004-12-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                     LENGTH: 8093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1994
                                 1467 ATTGTATAATATTTGAGAGGATTTATGAATATAAATTGGGTTTTGTTTATAATTAGTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2234 TTATACATTATTATCAT 2250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
272 CTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGATATGGCAAATGGTTTTTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         307, Application US/10517441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAAACATTTGGAAT 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MARTENS, John
MODEL, Fabian
NIMMRICH, Inko
RUJAN, Tamas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGATTTTTAAATTAAT 515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAATGCCGCA 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATTATTAGCA 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGATATGGCA 318
                                                                     ATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGAATATATGTCTAATCTTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGAATATATG
                                                                                                         0
                                                                                                     Score 40.6; DB 7; Length 8093; Pred. No. 2:7; 0; Mismatches 229; Indels 0
                                                                                                                                                                                                (Homo sapiens)
                                                                                                       0;
                                                                                                       Gaps
                                 1526
                                                                     271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S.
               S
                                                    밁
                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
```

```
RESULT 6
US-10-517-441-441
                                                                                                                                                                                                                            ; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
US-10-517-441-441
                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 2147
SEQ ID NO 441
LENGTH: 12610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 441, Application US/10517441 GENERAL INFORMATION:
                                                                                                                                                                                            Query Match
                                                                                                                                                    Matches 178;
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: HOBFLER, Heinz
TITLE OF INVENTION: Method and nucleic acids for the improved treatment of breast |
TITLE OF INVENTION: Decidiferative disorders
FILE OF INVENTION: Method and nucleic acids for the improved treatment of breast |
TITLE OF INVENTION: Decidiferative disorders
FILE OF INVENTION: 2001-67-93
CURRENT FILING DATE: 2004-12-11
PRIOR APPLICATION NUMBER: PCT/EP2003/010881
PRIOR FILING DATE: 2003-04-17
PRIOR APPLICATION NUMBER: DE 10317955.0
PRIOR APPLICATION NUMBER: DE 1030096.8
PRIOR FILING DATE: 2003-04-17
PRIOR PILING DATE: 2003-01-01
PRIOR PILING DATE: 2003-01-01
PRIOR FILING DATE: 2003-01-01
PRIOR FILING DATE: 2003-01-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: FOEKENS, John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                   ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                   Local Similarity 45.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1827 AAAAAAGTTAAAATATTTTATATTTTTAATTTTGGAGTGTAATTTT 1873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    392 AAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATTATTAGCACTATATTTTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      332 AGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACATTTTGGAATGTTCCTGAGCTTG
291 TGGTGATCAAAGTTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGA 350
                                                                                                       231 TGCTGAGAGAATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAA 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AÄGTGTTTATTTTÄGGTÄGGATTTTTTAAAATAAAGTAGTAATATTTACGTAGATAAGAT 1826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAATGCCGCAAGATTTTTTAAAT 511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTTAAATATTTTTATTTGTGTGTTATTTTATATATAGAATGTGTACGATAGTTTTAAA 1706
                                                                 AAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAGAATTATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACTGGGAAGGAGGATTTTTTCAA 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HARBECK, Nadia
KOENIG, Thomas
MAIER, Sabine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MARX, Almuth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SCHMITT, Armin
SCHMITT, Manfred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MODEL, Fabian
NIMMRICH, Inko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RUJAN, Tamas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MARTENS,
                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          John
                                                                                                                                                 0; Mismatches
                                                                                                                                                                      Score 40.4; D
Pred. No. 3.2;
                                                                                                                                                                                              B
                                                                                                                                                    206;
                                                                                                                                                                                          7;
                                                                                                                                                                                            Length 12610;
                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              618
                                                                                                                                                    4
                                                                                                                                                    Gaps
                                                                 7812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 391
```

ce

```
ş
                                                                           밁
                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 7
US-10-517-441-715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
   맑
                                                                                                                                                                                                                                 ; OTHER INFORMATION: chemically treated genomic DNA US-10-517-441-715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 715, Application US/10517441 GENERAL INFORMATION:
                                                                                                                                                                      Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 715
                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/517,441
CURRENT FILING DATE: 2004-12-11
PRIOR APPLICATION NUMBER: PCT/EP2003/010881
PRIOR FILING DATE: 2003-10-01
PRIOR APPLICATION NUMBER: DE 10317955.0
PRIOR FILING DATE: 2003-04-17
PRIOR PHILING DATE: 2003-04-17
PRIOR APPLICATION NUMBER: DE 10300096.8
PRIOR FILING DATE: 2003-01-07
PRIOR FILING DATE: 2003-01-07
PRIOR FILING DATE: 2003-01-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: LOOK, Maxime P.
APPLICANT: MARX, Almuth
APPLICANT: HOSFLER, Heinz
TITLE OF INVENTION: Method and nucleic acids for the improved treatment of breast cel
TITLE OF INVENTION: proliferative disorders
FILE REFERENCE: 47675-93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: FOEKENS, John APPLICANT: HARBECK, Nad: APPLICANT: KOENIG, Thoma
                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2002-10-01
NUMBER OF SEQ ID NOS: 2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: DE 10245779.4
                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                              LENGTH: 12610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   471
                                                                                                                231 TGCTGAGAAATTTATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAA
                                                                                                                                                                      h 4.0%;
Similarity 45.9%;
                                                                           MARTENS, John
MODEL, Fabian
NIMMRICH, Inko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAATTGTATATAATTAAAGTATATAATT 8136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTATCTGCTGTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATAAAGTAAGTTATTATAGTATATTGAAATGTTATTGTGAAATTAGATTTTGTTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RUJAN, Tamas
SCHMITT, Armin
SCHMITT, Manfred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAAAAATGTTTTCGTGTAGATTGTTTTAATAGTTTTTTTGAGTTTTAATTGAAATGTAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTTTTTÄGAAAGTAATAAATTGATATAAGATTATGATGTTTAATGAGTTTTTÄAA 7992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTATTCAGATGACGATAAATTATTAGCACTATATTTTTTTCTCTGTACAGGAAATTCCACT 470
                                     TGGTGATCAAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAGGCTAAATCATTAGAGAATTATATT 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGTCAATATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KOENIG, Thomas
MAIER, Sabine
                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nadia
                                                                                                                                                    °,
                                                                                                                                                    Score 40.4; DB 7; Length 12610;
Pred. No. 3.2;
0; Mismatches 206; Indels 4;
                                                                                                                                                                                                                                                 (Homo sapiens)
                                                                                                                                                    4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8108
   7872
                                                                           7812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       590
                                       350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                  밁
                                                                                                                                                                Ş
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 8
US-10-932-182A-166164/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                       밁
                                                                                           Ś
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-932-182A-166164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/932,182A
CURRENT FILING DATE: 2004-09-02
NUMBER OF SEQ ID NOS: 197023
SOFTWARE: Patentin version 3.3
SEQ ID NO 166164
LENGTH: 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 166164, App. GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 243; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: NAKAO, YOSHIHIRO
APPLICANT: NAKAWURA, NORIHISA
APPLICANT: KODAWA, YUKIKO
APPLICANT: KUDIMURA, TOMOKO
APPLICANT: ASHIKKAI, TOSHIHIKO
TITLE OF INVENTION: METHODS FOR ANALYZING GENES OF INDUSTRIAL YEASTS
FILE REFERENCE: 030685-043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA ORGANISM: Saccharomyces pastorianus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     7873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8109 AAATTGTATATAATTAAAGTATATAATT 8136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                7993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        351
                     430
                                                                                                                                                                                                                                                                                         474
                                                                                                                                                                                                                                                                                                                            190 GTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAA
                                                                                                                                                                                                                                                                                                                                                                                                      130 GAATATCGAGCTAAGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAAT 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   70 ATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGAATT 129
TTATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCA
                                                                                                                                                                                                                                           GAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTTCTAAA 309
                                                         GATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAAC
                                                                                                                                                                                                             ATTTATAGGGCTTACCTTGTTTAACTAATAATACGTAAATATTTAACTTAGCTCTCAAAC
                                                                                                                                                                                                                                                                                         CTATÁAATATATAĞĀAAATTTCTATAAATAATATTATATTCTTAATCCAAGATTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                             ATAATAATTCTTATACATATCATTACAATATGTCATTAGCTTTTTATATAATCTTTTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTATCTGCTGTAACTTCACTGGGAAGGAGGATTTTTTCAAAAAACTTTTTACAATGGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTATTCAGATGACGATAAATTATTAGCACTATATTTTTTTCTCTGTACAGGAAATTCCACT 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGAAGTTTTGAAATAATGTTTTTTTTTATTAATTGTTTTAGTTTTTAATGGAAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGTCAATATCCTCAAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGC
                                                                                             ATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAA 429
                                                                                                                                  TAAAAATGTTTTTGTGTAGATTGTTTTAATAGTTTTTTTGAGTTTTTAATTGAAATGTAAT 8108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTTTTAGAAAGTAATAATTGATATAAGATTATGATGGTGTTAATGAGTTTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAGGCTAAATCATTAGAGAATTATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/10932182A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 40.2; DB 6;
Pred. No. 2.2;
0; Mismatches 338;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 820;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                       489
                                                                                                                                    . 295
                                                                                                                                                                        369
                                                                                                                                                                                                               355
                                                                                                                                                                                                                                                                                                                                                                                                                                                 535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7992
```

```
Ś
                                                                                                                                                                                                                                                                                        S
                   S
                                                    밁
                                                                                  8
                                                                                                                      밁
                                                                                                                                                ş
                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                          뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 9
US-10-868-397-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                              US-10-868-397-1
                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Sim
Matches 199;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: FastSEQ
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Applicat GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2003-08-27
PRIOR APPLICATION NUMBER: 10/419,723
PRIOR FILING DATE: 2003-04-18
PRIOR APPLICATION NUMBER: 10/255,120
PRIOR FILING DATE: 2002-09-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Gulcher, Jeffrey R.
TITLE OF INVENTION: SUSCEPTIBILITY GENE FOR
TITLE OF INVENTION: METHOD OF TREATMENT
FILE REFERENCE: 2345.2010-012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Gretarsdottir, Solveig
APPLICANT: Thorleifsson, Gudmar
APPLICANT: Gilcher, Jeffrey R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 09/
PRIOR FILING DATE: 2001-03-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/868,397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2003-09-25
PRIOR APPLICATION NUMBER: 10/650,120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: PCT/US03/29906
                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
LOCATION: 1-1691140
                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: n = A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 1691140
                                                                                                                                                                                         544017
                                                                                                                                                                                                                                                          543957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 10/067,514 FILING DATE: 2002-02-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 09/811,352
                     383
                                                                                                                                                                                                                                                                                        143 AGAAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGTATCTAAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
4
                                                                                                                                                                                                                                                                                                                                             Similarity
 CTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATTATTAGCACTAT 442
                                                                                                                                                                                                                                                        ATAAAAAATATATAGTTTAAAGAGCTATAATATCTAGCAGTTCTTTTGTTTCTAAAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTACTTTTGTCACTACAGTTTAACATATTTATGTAACCATTTTAATACATATGTAGATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAATAAGTGGTTAAGTAATTTTAAAACATTTGATTTACTTTCGTTGAGCATATTAAATCA
                                                   GTATTTGAAAAGCTCAACCTCAGCTTCCCCCTGTTGTTTTATCTAGAATATTTAAGACTTT
                                                                                                                      AGAAAGCCTAAATAGTATTTTAAAAATAAAGCTTCCATATATTCAATCTTATTGGAAAAA
                                                                                                                                                                                     CCTGGACATTGAGTAACAAATAAGTTAATAAAGCAATAGTTTGTTATTTTGATTTTATATC
                                                                                                                                                                                                                     CTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGAATATATGTCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/10868397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTTATATTGATAAAAATATAATTAATACATTCTCCTTTAG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATTATATTGAGAGAAAAAACTTTCTAAACCTTTCTTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGGAAGGAGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTAGAG 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTTACCTTATCTGCTGTAACTTCA 549
                                                                                  GTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACATTTGGAATGTTC
                                                                                                                                                    ATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGATATGGCAAATG
                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for Windows Version
                                                                                                                                                                                                                                                                                                                                         42.9%;
                                                                                                                                                                                                                                                                                                                       Score 40; DB 6; Length 1691140;
Pred. No. 9.1;
0; Mismatches 265; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAMOH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STROKE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                650
                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                        202
                                                                                                                                                       322
                                                                                                                                                                                                                       262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         175
                                                   544196
                                                                                                                      544136
                                                                                                                                                                                     544076
                                                                                                                                                                                                                                                        544016
                                                                                                                    RESULT 11
US-10-932-182A-76518
                                                                                                                                                                                     뭉
                                                                                                                                                                                                               $
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
US-11-021-837-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loc
Matches
                                                                                  Sequence 76518, Application US/10932182A GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 43, Applica GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
APPLICANT: NAKAO, YOSHIHIRO
APPLICANT: NAKAMURA, NORII
APPLICANT: KODAMA, YUKIKO
APPLICANT: FUJIMURA, TOMOO
APPLICANT: ASHIKARI, TOSHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 37
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  544377
                                                                                                                                                                                                                                                                                                                         14133
                                                                                                                                                                                                                       307 AAA 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   37627
                                                                    YOSHIHIRO
```

```
; ORGANISM: Staphylococcus saprophyticus US-11-021-837-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 63
SOFTWARE: PatentIn version 3.3
SEQ ID NO 43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Alm, Richard
APPLICANT: Manning, Paul
APPLICANT: Mclaughlin, Robert
APPLICANT: Mclaughlin, Robert
APPLICANT: MacCormack, Kathleen
TITLE OF INVENTION: Staphlococcus Saprophyticus Nucleic Acids and Polypeptides
FILE REFERENCE: 101324-US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 60/533534
PRIOR FILING DATE: 2003-12-31
PRIOR APPLICATION NUMBER: US 60/600680
PRIOR FILING DATE: 2003-08-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/11/021,837
CURRENT FILING DATE: 2004-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
mes 116; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               544197 CTTAACATAAATCAAAAAATATGTATTTTTTCTAGTTGAGATTTAACTAGATTAATTC 544256
14253 AAA 14255
                                                                                                                                                                                                                                                                                                                                                                     14073 AGATGGTAGTAGGTATTAAGTATTAGTTAATATACTGCCACAAAATGTGGCTTAAGT 14132
                                                                                                                     14193 CTTGGATTTCCTTGTAATCAATTTGCTAAACCAAAAACCAGGTACTGATGACCAAATAGCT 14252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14013 GTTATAAAAGGAGTGCTATAAAATAACTAGTAATATTTATGATATACAAGTTGTTAACAA 14072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       67 GATATAGTACGTATACTAAACTTTAAGCAAACAGATGAGGGTCATACAGCATCATATGGA
                                                                                                                                                                                                                                           GGTCAATTTGAAGAATTAGAAGAATATTACCAAAAATATAAAGAGCAAGGGCTAATTATA 14192
                                                                                                                                                                               CAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCT
                                                                                                                                                                                                                                                                                           AATGTATCTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                              attgaatatcgagctaagaaataatattagcttacgctttggctgtaagtggtattcat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCTTTTAAAAATTATCACAATAGCTGTAAAGTCAATTGTGTTA 544420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAATGCCGCAAGAT 502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTTTTCAAAAACTTTTACAATGGATTAGAGGCTAAATCATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCACTGAGTAAAATAGATGCCATTTTTTTACTAAGTAATTAAAACATTGTCAGAGGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACTGGGAAGGAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTGTGGTATTTTTGGCTATCATAATAAAGGTATTGCATTTCCAAACTGCAGAATATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/11021837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 39.8; DB Pred. No. 5.3; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    127;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 37627;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             562
                                                                                                                                                                                                                                                                                                           246
                                                                                                                                                                                                                                                                                                                                                                                                                                    186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         544316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

TOMOKO NORIHISA

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
US-10-517-441-414/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA
; ORGANISM: Saccharomyces pastorianus
US-10-932-182A-76518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: METHODS FOR ANALYZING GENES OF INDUSTRIAL YEASTS FILE REFERENCE: 030685-043
CURRENT APPLICATION NUMBER: US/10/932,182A
CURRENT FILING DATE: 2004-09-02
NUMBER OF SEQ ID NOS: 197023
SOFTWARE: PATENTIN VERSION 3.3
SEQ ID NO 76518
LENGTH: 2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 414, Application US/10517441
GENERAL INFORMATION:
APPLICANT: FOREENS, John
APPLICANT: HARBECK, Nadia
APPLICANT: KOENIG, Thomas
                                                                                                                                                   SEQ ID NO 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: APPLICANT:
                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: PCT/EP2003/010881
PRIOR FILING DATE: 2003-10-01
PRIOR APPLICATION NUMBER: DE 10317955.0
PRIOR FILING DATE: 2003-04-17
PRIOR APPLICATION NUMBER: DE 10300096.8
PRIOR FILING DATE: 2003-01-07
                                                                                                                                                                PRIOR APPLICATION NUMBER: DE 10245779.4
PRIOR FILING DATE: 2002-10-01
NUMBER OF SEQ ID NOS: 2147
                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/517,441
CURRENT FILING DATE: 2004-12-11
                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: HOEFLER, Heinz TITLE OF INVENTION: Method and nucleic acids TITLE OF INVENTION: proliferative disorders FILE REFERENCE: 47675-93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                     ORGANISM: Artificial Sequence
                                                        OTHER INFORMATION: chemically treated genomic DNA
                                                                             FEATURE:
                                                                                                                  TYPE: DNA
                                                                                                                                 LENGTH: 19634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1475 ÁTATAAATGÁTÁATÁCTATTACTTCCAATACATTAGAAGATAAATGTÁATAATAATGATA 1534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1535 GTAATGACAGTAATGACAACCAAAAACAAAAAAAAATATTAAAAAAAGTTTCATGATA 1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 314 TG 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                194 CTAAACTTCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        134 ATCGAGCTAAGAAAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGTAT 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                占:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KOENIG, L...
TER, Sabine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGAATTGTATTCTACTTTTGATACATCTGATGAAAATATTGATGATGATGATGATA 1654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATATGTCTAATCTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOOK, Maxime P. MARX, Almuth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCHMITT, Armin
SCHMITT, Manfred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RUJAN, Tamas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NIMMRICH, Inko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MARTENS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S, John
Fabian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 39.6; DI
Pred. No. 3.7;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
 Score 39.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멂
 B
                                                                                                                                                                                                                                                                                                                                                                                                                    for the improved treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               , e8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6;
 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 2460;
Length 19634;
                                                        (Homo sapiens)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                    of breast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                                                                                                                                    Ge
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            皮
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                     ; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA
US-10-517-441-688
                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: proliferative disorders FILE REFERENCE: 47675-93
CURRENT APPLICATION NUMBER: US/10/517,441
CURRENT FILING DATE: 2004-12-11
PRIOR APPLICATION NUMBER: PCT/EP2003/01081
PRIOR FILING DATE: 2003-10-01
PRIOR PRIOR PRICATION NUMBER: DE 10317955.0
PRIOR APPLICATION NUMBER: DE 10317955.0
PRIOR FILING DATE: 2003-04-17
PRIOR APPLICATION NUMBER: DE 1030096.8
PRIOR FILING DATE: 2003-01-07
PRIOR APPLICATION NUMBER: DE 1030096.8
PRIOR FILING DATE: 2003-01-07
PRIOR APPLICATION NUMBER: DE 10345779.4
PRIOR FILING DATE: 2002-10-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-517-441-688/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 13
                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 2147
SEQ ID NO 688
LENGTH: 19634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 152; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                          Query Match
Best Local Similarity
                                                            Matches 152;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: HOEFLER, Heinz
TITLE OF INVENTION: Method and nucleic acids for the improved treatment of breast cel
TITLE OF INVENTION: proliferative disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: FOEKENS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                ORGANISM: Artificial Sequence
                                                                                                                                                                                                                    TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10685 ATATTATCTAACATTCAACTTTTAAAAATTATATATAAAA 10646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              e 688, Application US/10517441 INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           425
245 ATCAAGAATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTT 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATCAAATGCCGCAAGATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAAATTATTAGCACTATATTTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ÁTTAÁTCTTTTÁATAATCATTTTATATATTCCCATACÁAATAAAAATATTTAACTAATAA 10926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCAAGAATATATGTCTAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTAĀĀĀCTTATCĀĀTĀAAATĀTĀĀĀTĀĀĀAAAĀTTAATTTTTĀĀCTTCCCTTCTATĀĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTCACTGGGAAGGAGTTTTTTCAAAAACTTTTACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOOK, Maxime P.
MARX, Almuth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SCHMITT, Armin
SCHMITT, Manfred
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MODEL, Fabian
NIMMRICH, Inko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KOENIG, Thomas
MAIER, Sabine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RUJAN, Tamas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MARTENS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HARBECK,
                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nadia
                                                                            44.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        44.78;
                                                          Score 39.2; DB 7;
Pred. No. 6.5;
0; Mismatches 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. 6.5;
O; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6.5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    188;
                                                                                               Length 19634;
                                                            Indels
                                                                                                                                                         (Homo sapiens)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                            <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       364
```

ないないはい

```
; FEATURE:

; NAME/KEY: midc feature

; LOCATION: (1)'...(397658)

; OTHER INFORMATION: n = A,T,C

US-11-044-879-3
                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                      В
                                                                                                                                                                       Ś
                                                                                                                                                                                                             문
                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                         뭉
                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 14
US-11-044-879-3/d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
   片
                               S
                                                                     밁
                                                                                             .₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    믕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 3, Application US/11044879
GENERAL INFORMATION:
APPLICANT: ZHANG, HONGYU et al.
TITLE OF INVENTION: ISOLATED HUMAN TRANSPORTER PROTEINS,
TITLE OF INVENTION: NUCLEIC ACID MOLECULES ENCODING HUM
TITLE OF INVENTION: AND USES THEREOF
FILE REFERENCE: CL001172CON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/11/044,879
CURRENT FILING DATE: 2005-01-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
340738 TTCTAATTTAACGTGTAATAGAGATAAGATCCAAGTGGTGAGACAGAACAACAACAGGAGCAG
                                                                                                                                             340858
                                                                                                                                                                                                             341038 TATGTTACATATACACATACTATGTATGTATGTATTATATTCAGCACATATAATAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10685 ATATTATCTAACATTCAACTTTTAAAAATTATATATAAAA 10646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10985
                                                                                                                                                                                                                                                                                                                                                                                        141 TAAGAAATAATATTAGCTTACGCTTTGGCTGTAAGTGGTATTCATAATGTATCTAAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            397658
                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACGATAAATTATTAGCACT
                                                                                                                                        AATCAAATGCCGCAAGATTTTTTAAATTTAATTTGATTTCTTATTTTACCTTATCTGCTGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCTAACAAAAAAAAAATATTTCTTAAAATACACTTTTATTTATAACTCCATTTCTAAA 10866
                                 ATATTTTTTCTC-TGTACAGGAAATTCCACTGGAGGAAAATCAACAATCAAATGCCGCAA
                                                                     CATAGTCCCTGTGTTGAAGAAGATGACTCTAACTGAGGAGGTAAATAACTAATTGCCTAA 340739
                                                                                                                                                                                                                                               TAATCTTTCATCTGCACTATTAGGTGAAAATGGTGATCAAATTTCTAAAGATATGGCAAA
                                                                                                                                                                                                                                                                                                                    TCCTGATGACTATTATAAGAATAAAGAGACTGCTGAGAGAATTTATCAAGAATATATGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATAAATTATTAGCACTATATTTTTCTCTGTACAGGAAATTCCACTGGAGGAAAATCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAACATTTGGAATGTTCCTGAGCTTGAAAATAAACCATTGAGTGCTTATTCAGATGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            АТТААТСТТТТААТААТСАТТТТАТАТАТТСССАТАСААТАЛАЛАЛТАТТТААСТААТАЛ 10926
                                                                                                                                                                         TGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTCAAAACATTTGGAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTCACTGGGAAGGAGGATTTTTCAAAAAACTTTTACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAAAGATATGGCAAATGGTTTTTATAAGAATGAACTGGATTTTGAAGGTCAATATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%;
ilarity 45.5%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                           Score 39.2; DB 8;
Pred. No. 11;
0; Mismatches 253;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENCODING HUMAN TRANSPORTER PROTEINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 397658;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     584
                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                           2
                                                                                                                                                                                                                                                                                                                    260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           364
                                  499
                                                                                                                                                                                                             340859
                                                                                                                                                                                                                                               320
                                                                                                                                                                                                                                                                                                                                                                                            200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     424
                                                                                                                                                                                                                                                                                                                                                       340979
```

```
S
                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
Search completed: March Job time: 280 secs
                                                                                                       Ś
                                                                                                                                                      밁
                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
US-10-450-763-12549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-450-763-12549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/450,763
CURRENT FILING DATE: 2003-06-11
PRIOR APPLICATION NUMBER: PCT/US01/08631
PRIOR FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/540,217
PRIOR FILING DATE: 2000-03-31
PRIOR APPLICATION NUMBER: 09/649,167
PRIOR APPLICATION NUMBER: 09/649,167
PRIOR FILING DATE: 2000-08-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: Custo
SEQ ID NO 12549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 12549, App. GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 126;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 60736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Hyseq, Inc
TITLE OF INVENTION: NOVEL NUCLEIC ACIDS AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: 790CIP3/US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: (916)..(215)
OTHER INFORMATION: 57% homologous to Plasmodium lophurae histidine-rich
OTHER INFORMATION: protein, accession number X01469, Smith-Waterman Score=915.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: SIMILAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                340618 TAGAGTGTTTAAAATTTATTGTTGAATAATCTATAAGCAAAATCTTGA 340571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       559
                                                                             478
                                                                                                               397
                                                                                                                                                                                                                                                                                                                                                    217 AAGAATAAAGAGACTGCTGAGAGAATTTATCAAGAATATATGTCTAATCTTTCATCTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                 157 GCTTACGCTTTGGCTGTAAGTGGTATTCATAATGTATCTAAACTTCCTGATGACTATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                500 GATTTTTTAAATTAATTGATTTCTTATTTACCTTATCTGCTGTAACTTCACTGGGAAG-G
                                                                                                                                                                                                                                                                         277 CTATTAGGTGAAAATGGTGATCAAATTTCTAAAGATATGGCAAATGGTTTTTATAAGAAT 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Custom
                                                                                                                                                                                                                                   GATAATGATGGTAATGGTAATGATGGTGACAATGATAATGATGATGGTGATAATGATGAT
                                                                                                                                                                                                                                                                                                                AGGATTTTTTCAAAAAACTTTTACAATGGATTAGAGGCTAAATCATTA 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAACTGGATTTTGAAGGTCAATATCCTCAAAACATTTTGGAATGTTCCTGAGCTTGAAAAT
                                                                           AGTGATGGTAATGATGATGATGATA
                                                                                                               AAACCATTGAGTGCTTATTCAGATGACGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/10450763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%;
                  2005,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches 145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 39; DB 7; Length 1083; Pred. No. 4.4;
                    08:16:17
                                                                                                               427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      POLYPEPTIDES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                            396
                                                                                                                                                                                                                                                                                                                                                      276
                                                                                                                                                          477
                                                                                                                                                                                                                                     417
                                                                                                                                                                                                                                                                                                                357
                                                                                                                                                                                                                                                                                                                                                                                                                                 216
                                                                                                                                                                                                                                                                                                                                                                                               297
```

1,

THIS PAGE BLANK (USPTO)